

INTELLIGENT COMPUTING

COMPARED


23 MP3 AND PORTABLE VIDEO PLAYERS

11 COMPLETE INTERNET SECURITY SUITES

REVIEWED



HTC HD7, MOTOROLA QUENCH, DELL ZINO HD, NORTON 360 v5, XFX RADEON HD 6970

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The truth about mobile number portability
Secure your Wi-Fi router against intruders
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 Network **18**

Everything's changing



As history has taught us time and again, nothing is permanent, and no company or product is too big to fade away when its time has passed. Even monopolies which manage to fend off competitors in their own fields can't stand up when the entire industry shifts and makes them obsolete.

Microsoft, for instance, has enjoyed near complete domination of the desktop operating system market, and has remained more popular than its alternatives for decades, but is suddenly facing the heat now that people are shifting to mobile phones and tablets as their primary devices. Nokia ruled over the high-end phone market till touchscreen smartphones took over, and even Intel, riding high with record-breaking benchmark performance figures, is suddenly interested in the low-power smartphone and tablet arena. At least they aren't pretending they're untouchable, like others before them have tried to do.

People are gravitating away from the PCs we're used to seeing, and towards a new generation of devices and appliances that run the programs they need and access all the same information off the Web. For a large number of people—those who don't have to use standardized office applications or work with specialized peripherals—the PC might already be irrelevant. A few years ago it seemed that netbooks would redefine computing, but it turns out that they were the result of manufacturers understanding only half the problem: netbooks fixed the problem of bulkiness, but were still tied down to legacy thinking of what hardware, operating systems and usage models should be like. Today, outside of the work environment, a tablet that lets you check email, surf the Web, make video calls and play games is a much better solution because it represents a total rethink of the overall experience. Both Android and iOS, the current major players, are designed with a new type of user and usage in mind. They're so satisfying to use that even those who still require PCs for their full-featured capabilities will wind up owning a tablet or other device that they'll use alongside for casual surfing and entertainment. Have tablets alone solved the problem or changed the world? Probably not; there are still major limitations, most importantly typing comfort. But we're getting there, and we're realizing how easy it would be to leave the PC behind.

We're also witnessing a brand new wave of thinking when it comes to designing software and even websites. Things a developer could take for granted, such as a roughly standard screen size and vast amounts of storage space, no longer strictly apply. On the other hand, there's suddenly a wealth of new input and output hardware to tap into, such as touchscreens, tilt sensors, accelerometers, compasses, GPS receivers and cameras. These devices are held differently and even that affects how we interact with them.

Even the pace of advancement has changed. New hardware and software is being developed so fast that a one-year gap between major releases is considered a long time. There's a huge difference in the capabilities of this year's flagship phones as compared to last year's, and the hints we have about what's coming next make life in 2011 all the more exciting. It's all adding up, and the age we're living in now will change not just "computing", but the whole human equation with technology.

Jamshed Avari
editor@chip.in



Contents

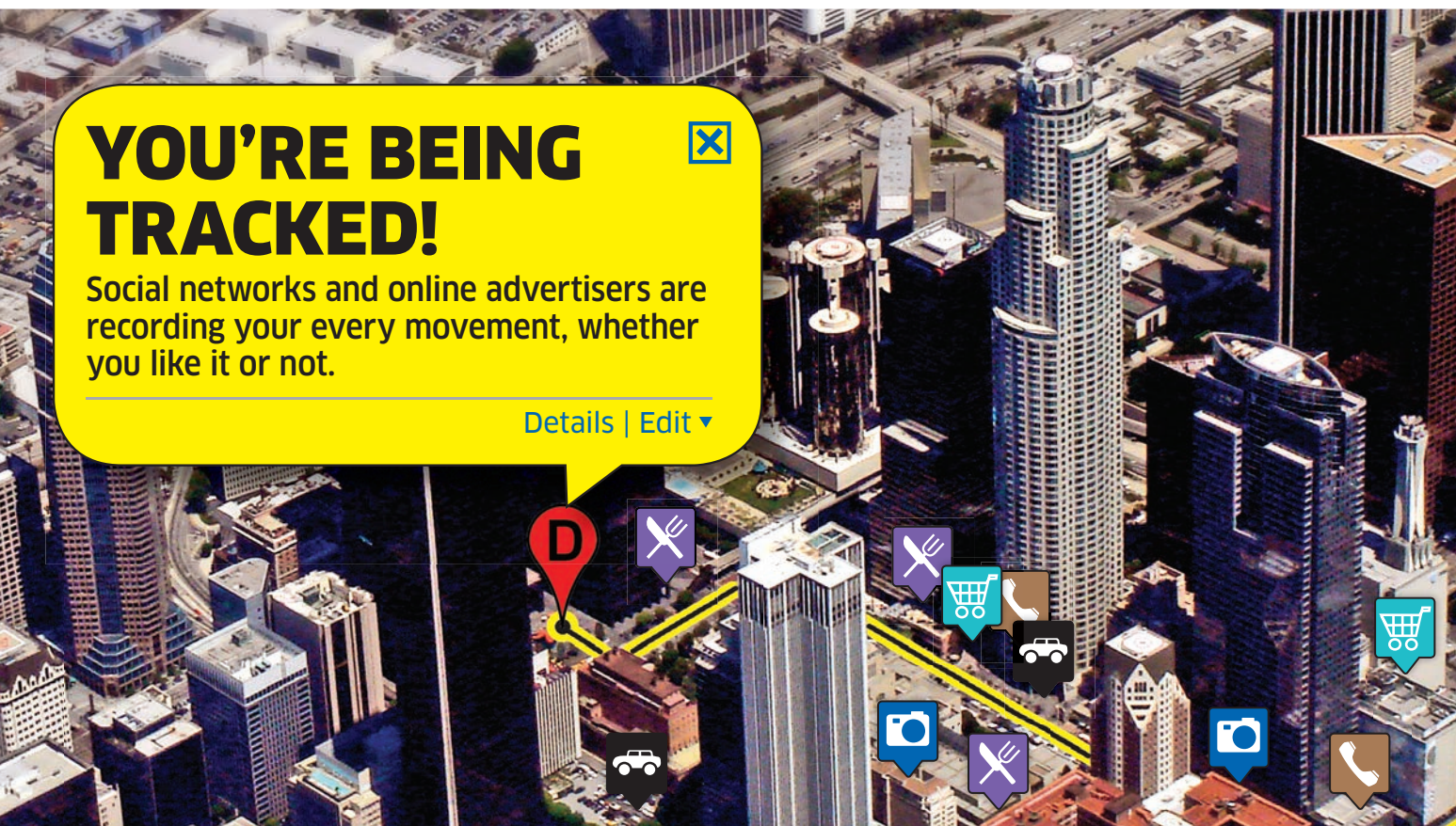
APRIL 2011

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Social networks and online advertisers are recording your every movement, whether you like it or not.

[Details](#) | [Edit](#) ▾



NEWSWIRE

- 14 In the News...**
A look at what's making news in the world of technology.
- 20 The Buzz List**
The people, products and innovations that have got the tech world talking.
- 22 New Products Launched**
A round-up of the latest products that are hitting shelves now.
- 26 Online Dispute Resolution**
A unique system designed to amicably settle disputes arising from online transactions.
- 30 Port of Despair?**
It hasn't been all smooth sailing for the recently introduced mobile number portability service.

TEST CENTER

- 34 Product Spotlight**
Does the HTC HD7 manage to silence the Windows Phone 7 critics?
- 36 Hardware Tested**
The latest PC hardware, mobile phones and peripherals tested and rated.
- 56 Entertainment Anywhere**
We compare the top MP3 players and PMPs, and show you which one is king.
- 66 Software Spotlight**
Norton 360 v5.0 - the best all-round security suite gets better.
- 68 Software Tested**
Everything from image editors and system tools to video editors and security suites.
- 76 Are You Well Protected?**
We compare the top security suites and show you where they succeed and fail.

FEATURED

- 86 You're Being Tracked!**
Is it really a good idea to broadcast personal information on social networks?
- 92 GPS: The Way Forward**
How map MapMyIndia is bringing GPS navigation to Indian consumers.
- 94 Dangerous Clicks**
New scams are tricking users into revealing personal information and infecting their PCs.
- 98 Blogs: A Thing of the Past?**
Has the evergrowing social networking phenomenon made blogging obsolete?
- 100 Web Watch**
We scour the Internet to bring you some interesting site that you might want to visit.

Contents

APRIL 2011



SUBSCRIBE NOW!

Turn to page 42

34 TEST CENTER HARDWARE

The latest hardware reviewed.



106 HANDS ON

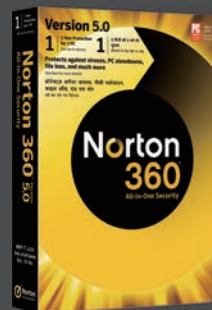
WIRELESS NETWORKING: TWEAK & SECURE

Tips to help you fine tune and secure your wireless network



ON DVD

Microsoft Office Home and Business 2010



66 TEST CENTER

SOFTWARE SPOTLIGHT

Norton 360 v5.0

HANDS ON

102 Dr CHIP

Our in-house expert helps you out with your computing woes.

106 Wi-Fi: Tweaked and Secured

Tips to help you fine tune and secure your wireless network.

110 Phrase It Right

Save time and speed up your work by automating common and repetitive tasks.

112 Tips N Tricks

Some useful tweaks and hidden application features you may not know about.

UNWIND

118 Exploring Mumbai's IT Bazaar

A glimpse of what Lamington Road has to offer.

120 Motorstorm Apocalypse

The Festival moves to a crumbling metropolis.

121 De Blob 2

Foil Comrade Black's evil monochromatic designs.

122 Bulletstorm

Kill with skill: Game-changer or failed gimmick?

123 Preview: Mortal Kombat

The series is back to its brutal, bloody best.

124 Fight Night Champion

The best Fight Night game yet.

126 Homefront

A fresh idea bogged down by generic gameplay.

REGULARS

03 Editorial, **08** Colophon, **10** Letters, **10** In the News..., **20** The Buzz List, **22** New Products Launched, **80** Long Term Test, **82** PC Configs, **100** Web Watch, **102** Dr CHIP, **112** Tips & Tricks, **128** Market Watch, **144** Contests, **146** Personal Tech

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ADVERTISER'S INDEX

Asian Institute of Gaming & Animation	121	Microworld Software Services Pvt Ltd	71
Asus Technology Pvt Ltd	13	N - Vidia	21
Base Corporation	51	Neoteric Informatique Ltd	Back Cover
Best It World (India) Pvt Ltd	7,17	Oracle India Pvt Ltd	Inside Back Cover
Busy Infotech Pvt Ltd	69	Pearson	53
Chirag Computers	39	Quantum Hitech Merchandising Pvt Ltd	49
Deja Vu Solutions Ltd	23	Ricoh India Ltd	9
Dell India Pvt Ltd	11	Safenet India (P) Ltd	143
Fashion Shoes	141	Scrum System	47
Gul Properties Pvt Ltd	Inside Front Cover	Shree Sagarmatha Distributors (P) Ltd	139
IMS Mercantiles Pvt Ltd	29	Spectra Computers India Ltd	143
India Digital Life Style Pvt Ltd	45	Symantec Software Solution Pvt Ltd	15
Intel Technology Pvt Ltd	5	Top Notch Infotronics (India) Pvt Ltd	111
Kaspersky Lab India	27	Transcend	19
Map My India.Com	25	Vodafone Essar Mobile Services Pvt Ltd	32-33
Maya Software Technologies	140		

INTELLIGENT COMPUTING

CHIP

INBOX

Next month's Star Letter wins
accessories set (worth Rs 5,000)

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**STAR
LETTER**

This month's winner
gets a cool
accessories set

3G's teething troubles

Was reading the 3G cover story in this month's issue of CHIP, which seems to be a fair assumption of things to come. What's nice is that we can try out 3G on some telcos. But why is there no mention of the horrific drain it has on battery life? I tried it out on my iPhone 3GS. While it was blisteringly fast, and at times faster than my Internet connection at home, I found my day's worth of battery charge reduced to half a day at best. Phones are getting bigger and better in all aspects but the battery. Considering that 3G will be the norm why is it that every cell maker barring BlackBerry has no idea how to make their phones last without the need to carry a charger around everywhere? Moreover, the prices of 3G schemes that have been announced thus far are hardly attractive. Limiting the number of 3G licenses has decreased competition between operators, and now they're charging the earth. I hesitate each time I want to use my iPhone for anything heavy like watching a YouTube video, which makes it all sort of pointless.

Thanks,

- KISHEN MANSUKHANI

Hi Kishen,

We agree with you completely; 3G so far has been a bit of a damper, and we're far from the ideal of affordable always-on broadband. However competition will pinch fixed-line ISPs as well, and we might just see their prices improving because of it. You're right about battery life, although it's hard to pin down the exact hit a user will take because mileage will vary. We've become used to (or resigned to) charging our smartphones every night, which doesn't say much for the industry in general—a gadget-crazy colleague recently gushed to us that his newly purchased Nexus S's battery could last "almost an entire day", and was actually proud of the fact! Battery technology just hasn't progressed as fast as everything else has in the past decade, and the manufacturers seem more focused on reducing size and weight. Personally, we wouldn't mind seeing phones on the market as thick as the Nokias of days gone by, as long as their batteries last at least a few days at a stretch. Is anyone listening?

Regards,

- TEAM CHIP



Sachin Pandit

CONTACT INFO

Please send your
letters to:
editor@chip.in
with "LETTERS" in
the subject line

Phone confusion

Hi Team Chip,

I have been reading CHIP from the November '08 issue, when I first saw it in my school library. I love your magazine and I truly appreciate the effort you put in to come out with such a magnificent product. The new layout of your magazine is also very good. I was just about to buy a mobile for about Rs 20k and I saw your CHIP Insider cover this month. It was of great

help as now I think I should buy an Android phone because I keep seeing Android apps etc. I previously had a Nokia 5800 and I trust Nokia, but it does not seem to have adopted Android so I am confused whether to switch to some other brand or go with Symbian. The product comparison in this month's CHIP was also of great help to me as now I have shortlisted three devices, namely the OlivePad VT100, Motorola Defy, and a Nokia

C6-01. I already have a high-end gaming computer but I need a device for using the Internet and listening to music. I am also confused about whether I should opt for a mobile or a tablet.

I have converted my old laptop into a file server which is DLNA certified. I wanted to know how I can stream music and videos to my phone as my collection is large and occupies about 60GB. I read the cover story in the Jan 11 issue. So is

SMS US

Since we like knowing what's on your mind and what you think about our magazine, we bring you another way to get in touch. Do you have something to say about a test or review? Liked a feature story? Was the workshop useful? SMS us your feedback!

For general comments, create the following message:

ICCO <Your comments here>
Example: ICCO The cover story was very useful

To rate a story, product review, etc look out for the story tag at the base of each article and type:

ICCO <Story tag> <Rating>
Example: ICCO PWS 5

The "Story tag" is mentioned at the base of every story in the magazine and the "Rating" is on a scale of 1 to 5.

Finally, send your messages to **51818**. Cheers!

Please keep comments to 160 characters per message! Include your email address to help us reply or check out the SMS Feedback thread at www.chip.in/forums

it possible to stream content on all the devices I mentioned? Please provide your valuable feedback.

Regards,

– SAMBHAV PATNI

Hi Sambhav,

Thanks for your letter, and we're all glad the issue was useful to you. Sadly, Nokia seems to have abandoned Symbian, and so we cannot expect developers to continue supporting it for very long. At this stage, it is difficult to recommend a Nokia smartphone to a gadget lover who truly wants to use all its potential. Android will keep you quite happy. We'd also suggest waiting a little while before buying the OlivePad, as a number of Android tablets are set to come out in the next few months. At least wait till Android 3.0 becomes more widely available. You should definitely be able to stream from a DLNA server as long as you have a suitable Wi-Fi router and apps for your phone and tablet. The good ones aren't free, but you can keep checking our app reviews and searching online to see which ones are the best.

– TEAM CHIP

Piracy and broadband

Sir,

I have been reading CHIP since 2008. It has helped me in many ways. After some months of reading it I developed myself to a level that was pretty much sufficient for computer maintenance. But, since CHIP was rarely available in our local bookstall I could not read some of the issues in between. One day I installed two antivirus programs because I thought it would be more powerful. But after a few days my PC became very slow. When I scanned with both programs, I found different threats.

At the end of the year I made the decision to buy a new operating system. I read in CHIP that Windows Home Basic costs around Rs 4,000. So one day I asked a retailer to give me Windows Vista Home Basic. I gave him Rs. 4000 but to my surprise he returned Rs 3,500. This happened to me because I did not



know more about piracy. In the later issues of CHIP I read more about piracy. After knowing that I had bought a pirated OS, I wondered that if the tech shops sell pirated Windows then surely people will buy it. We buy it because we don't have any way but to become the part of the system. I want to get a broadband connection through our existing telephone line, but my a BSNL engineer informed me about WiMax. I browsed on BSNL's website and found that WiMax gives 512kb/s at Rs 750 (unlimited) whereas broadband through the telephone line gives 256kb/s at Rs 750 (unlimited). Even if you recommend WiMax, how can I share the connection between two PCs?

Thanks in advance.

– ARUN

Hi Arun,

The simple fact is that piracy is everywhere. Now that you know about it and how to recognize a pirated disc, you can make your own choices weighing the pros and cons. You're right, the situation exists both because of demand as well as supply. If you really want to break out of the system, there are always options.

Your options for an Internet connection will vary depending on where you live. Speak to your friends and neighbors to decide which option is best for you. Find out about the quality of service, customer support, and ease of installation as well as the subscription cost. No matter what you decide, you can buy a cheap wired/wireless router to share

the connection between two PCs, or use Windows' built in Internet Connection Sharing tool with multiple LAN cards.

– TEAM CHIP

Game prices

Respected sir,

I am a student of class X. I have been reading CHIP since 2007 and truly CHIP has been my friend, philosopher and guide. You all have been writing against piracy for a long time. But there seems to be no stopping to this epidemic. I think there has been an increase in piracy recently. Games, movies, songs etc are available in pirated form. Isn't our economy getting affected? I think that games, which are the most pirated media, should be available at lower prices so that the difference between pirated and original is not much. I think that the people will definitely go for original since it will have more features and the buyer will get peace of mind. And last, why can't Torrent websites be stopped from operating? They are the root of all the problems, aren't they?

– RIPON BORAH

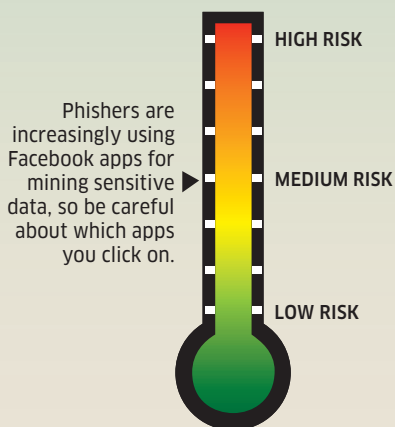
Hi Ripon,

Thanks for your letter. We're all happy to hear that CHIP means so much to you.

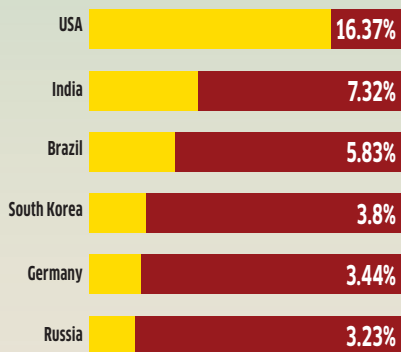
Piracy is a problem that affects all of us, but the issue isn't totally black and white. Game developers spend lots of money to produce games at today's standards, so we can't expect them simply to reduce prices no matter how great that would be. Torrents aren't the root of all evil either. The BitTorrent protocol is a legitimate and highly useful means of transmitting large files across the Internet efficiently. You can't ban the entire system just because of misuse, no matter how widespread. Besides, that creates a dangerous precedent for censorship and commercial control. Once we start banning things we don't approve of, there's no stopping anyone. The best approach is reasoning and education.

– TEAM CHIP

DANGER FORECAST



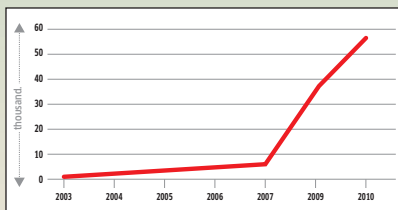
THE TOP-SPAM DISTRIBUTORS



These countries are responsible for the largest amounts of spam. India is now behind only the USA.

Source: Sophos

MALWARE FLOOD



The number of harmful software programs has increased by more than 3,000 percent in the last three years, according to Panda Antivirus.

Source: Panda Antivirus

FIGURE OF THE MONTH

\$1 billion

The estimated cost of redesigning the flawed Sandy Bridge chipset and replacing all shipped motherboards.

Source: Intel

IN THE NEWS...

COMPILED BY JAMSHED AVARI

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Research group says no amount of enforcement can contain piracy in emerging economies

A new report, entitled 'Media Piracy in Emerging Economies' finds that piracy in most developing nations will not stop until pricing is brought in line with local purchasing power. The study was conducted by the Social Science Research Council, an American organization. It involved three years of work by 35 researchers in countries including Brazil, India, Russia, Mexico, Bolivia and South Africa. According to the report, technological means of preventing piracy as well as laws designed to discourage it will largely continue to fail, because piracy in these markets is essentially caused by the lack of affordable access to software and content.

Taking Microsoft Office as an example, the study found that prices for a retail DVD



relative to local income are 5-10 times higher than in the US or Europe.

There is also no stigma attached to piracy, and education efforts have been unsuccessful. While laws have changed, governments haven't been adept at applying them. Even when such laws have been applied, there has been no significant effect on the overall supply of pirated software.

Even pirates who sell cheap software have a tough time because end users can often download the same software for free. Most interestingly, the study has debunked claims that piracy is directly related to organized crime and terrorism, a claim made by many enforcement agencies.

The report finds that simply modifying prices will have the most significant effect.

SOFTWARE

Strict GPL terms endanger free apps in app stores

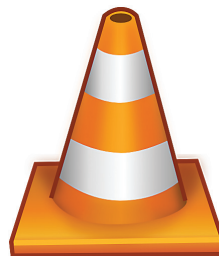
A philosophical battle over the distribution of free software is preventing a number of apps from being distributed via app stores, and could lead to a large number of currently available apps being delisted.

Apple's App Store, by far the most prominent one, set the stage by delisting the free VLC Media Player app, after one of VLC's original developers filed suit against Apple for imposing a DRM wrapper around the app, which restricts free redistribution, but is their standard procedure. The specific conflict arises because the Gnu Public License prohibits distributors from modifying the

app in ways that would prevent it from being shared. Apple's response to VLC was simply to remove the app from its store on the grounds that VLC's license obligations

conflict with Apple's own terms and conditions. While the GPLv2 is not explicitly prohibited, there is no middle ground between the two demands. Now, developers who might not have paid attention to the finer details of their apps' components might find themselves delisted as well. On the other hand, the Windows Phone Marketplace has explicitly prohibited several

open-source licenses since its launch for this very reason.



SECURITY

NEW SECURITY RISKS DETECTED AND PATCHED



ORACLE JAVA

Hackers can knock out a computer's CPU with Java. To do so, they only need to start a mathematical operation on a floating-point number in a way that causes an infinite loop.

SOLUTION: After waiting for weeks, Oracle has now released a safety update that rectifies this error.

MICROSOFT WINDOWS

Hackers can infiltrate the victim's computer using malicious code through just two weak points in Internet Explorer and in the Office code that handles the OpenType Compact Font Format.

SOLUTION: Microsoft has released patches that fix these two flaws as well as 20 other bugs in Office and Windows. Users should patch their computers using Windows Update.

FACEBOOK

Facebook users who use a secure HTTPS connection and then log in to Facebook applications which do not support HTTPS end up deactivating the advanced security system for the entire session.

SOLUTION: Facebook says it has been working on a solution for some time, but has not clarified why the HTTPS connection is not suspended only temporarily.

ADOBE FLASH

Despite improved security, Flash files running in a sandbox can still access the outside environment thanks to bugs in Windows.

SOLUTION: Adobe has not yet put out any comment on this situation.

SECURITY

Researchers find Chrome, WP7, Android too tough to crack

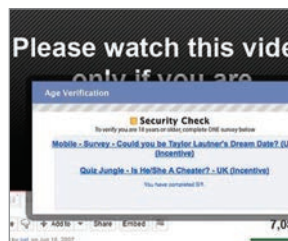
Apple's iOS and RIM's Blackberry OS were demonstrably compromised during this year's edition of the annual Pwn2Own hacking competition, while Windows Phone 7 and Android remained undefeated till the end. The mobile phone OS segment of the competition saw hackers and researchers from around the world compete to win cash prizes as well as the hardware they manage to hack.

The iPhone and Blackberry were hacked using a known flaw in the Webkit engine that powers their browsers. Teams working on Android and WP7 abandoned their efforts midway. The desktop browser segment of the competition saw Google's Chrome and Mozilla's Firefox walk away unscathed, while Safari and IE8 were compromised in short order. An additional \$20,000 bounty announced by Google was thus left unclaimed.



SECURITY

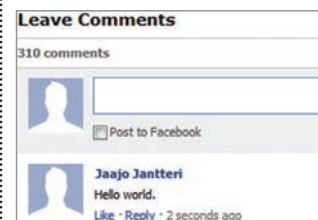
Attention-grabbing video links are nothing more than scams



Antivirus company Sophos is warning Facebook users against clicking on links to videos hosted on sites named FouTube, FBVideo and YoTube, amongst others. The sites are all fake, designed to lure users into clicking on links with sensational titles. Users are conned into allowing rogue Facebook apps to access their personal information, or into clicking unseen 'Like' links, which automatically cause status messages with the same scam links to be posted to all their friends' newsfeeds. The videos are of course not real, and those who click the links are forwarded to pages containing surveys, which earn the spammer money through referrals. Examples of such fake video names include "Look what happens when father catches daughter making sexy webcam video" and, exploiting the recent tragedies in Japan, "Japanese tsunami launches whale into building!"

PRIVACY

Facebook silences comment trolls?



Facebook's new comment system could make it difficult for anonymous commentators to leave pointless or incendiary comments around the Web, by forcing them to publish their real identities. The new system, already adopted by dozens of popular websites, allows comments to be published back to users' Facebook walls too. People are expected to start registering multiple accounts in order to bypass the invasive system.

SECURITY

Nuke fears fuel spam and scams



As if like clockwork, scammers have started making use of the recent spate of tragedies in Japan in order to trick users out of their money. Fake emails purporting to be from charitable organizations are making the rounds. Typical indicators that these are scams are the use of extremely poor grammar in addition to shady-looking email addresses and previously unheard-of money transfer services. Those who wish to make donations are advised to visit the official websites of the relief agencies.

GAMING

Game devs want DirectX dead?

A senior AMD official has suggested that it's time for DirectX to die, because the set of APIs that make it possible for game developers to harness the power of graphics cards are now more of a constraint than a help. Richard Huddy, a developer relations manager, says modern graphics cards are far more powerful than the current generation of consoles, but their power is untapped because of DirectX's overreliance. Moreover, he says, most games look and feel the same. Developers should be allowed low-level access to GPUs, he says, so that they can harness their raw power, even if that makes development more difficult.

CENSORSHIP

China apparently stepping up censorship after Egyptian protests

A number of reports from China about web services and other forms of communication suddenly becoming disrupted appear to suggest that the famously heavy-handed nation is cracking down on its citizens' freedom, possibly in a move to prevent the kind of public mobilization that have led to successful civil riots in Egypt and other parts of the world in the past few months.

The nation's media downplayed coverage of the protests in the middle east as they were happening, going so far as to block searches for the word "Egypt". Now, locals are reporting that even telephone calls are suddenly being cut off if the word "protest" in English



or Chinese is used more than once. Gmail users have also been experiencing disruptions, which the company has stated are entirely the government's doing, and have been carefully engineered to look like the service itself is down even though it's working fine. Even VPN (Virtual Private Network) services, which are used by foreigners to tunnel through the Chinese censors, have been facing such attacks.

WEB

Sites to load half a second sooner

Web giant Google claims that an improvement to the Javascript file that millions of websites use to display AdSense ads will shave an average of half a second off each page's load time, thus significantly speeding up the entire Web. By eliminating required browsers to pause while loading ads on each page, the Javascript file now lets pages be rendered while ads are loaded inside a separate iframe. The new method is currently supported only on Chrome, Firefox and IE8, but should roll out to all browsers soon.

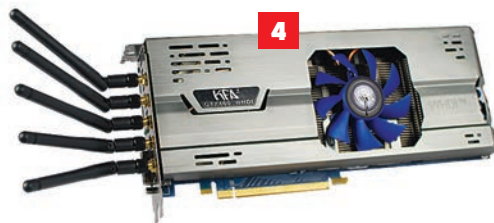


EVENTS

The gadgets of CeBIT 2011

CeBIT 2011, the annual technology trade show in Hannover, failed to make much of a splash this year. With most of the manufacturing industry shifting base to Asia, and several other industry shows in the same timeframe, there wasn't much new or unique to be seen. Amongst the standouts were Asus' gaming peripheral, called the Wave Xtion, which brings motion control to the PC platform. The Griffin Beacon is a 360-degree IR emitter that turns an iPhone into a universal remote. On the PC front, MSI showed off a touchscreen nettop and Galaxy demoed a wireless GTX460 graphics card. HP's TouchPad tablet also garnered interest.

(1) Asus Wave Xtion; (2) Griffin Beacon; (3) MSI Butterfly; (4) GTX460 WHDI; (5) HP TouchPad



CORE TECH

ARM vs X86



PCs have been using X86 processors since they first arrived on the scene, and millions of chips using this fundamental architecture have powered desktops, laptops, and netbooks ever since. ARM, a competing architecture, has found its niche in low-powered applications such as industrial machinery and appliances. Now, the two worlds are colliding, with smartphones and tablets the most visible battlegrounds. While Intel and AMD are trying to shrink X86 chips to cut down on heat and power consumption, Nvidia is beefing up its ARM designs to boost performance. The differences between the two mean that mainstream PC software hasn't been able to run on ARM CPUs, but that might become irrelevant with such powerful alternatives as Android and iOS—and rumor has it that an ARM-compatible version of Windows is imminent.

HARDWARE

Thunderbolt

It's been no secret that Intel and Apple have spent the last few years working on a new peripheral interconnect standard to compete with the likes of USB. Thunderbolt, also known by its pre-launch codename 'Light Peak', formally debuted on the new MacBook Pro line, which should be hitting stores in India this month. While there aren't any actual peripherals yet that could make use of it, Thunderbolt promises speeds of up to 10 Gb/s in each direction (as opposed to the 4.8 Gb/s of USB 3.0). Interestingly, Thunderbolt uses the existing PCI Express specification for carrying data as well as DisplayPort specification for display information. The standard uses the same plugs and cables as Mini DisplayPort, making Thunderbolt compatible with a host of existing devices. Both Apple and Intel are touting benefits for high-res displays and mass storage devices such as those found in professional video studios. A small number of peripheral manufacturers are on board, but no other PC vendor has announced plans to add Thunderbolt to their products.



BUZZ LIST

COMPILED BY JAMSHED AVARI

The simple lowdown on what everyone's talking about this month

EVENTS

SXSW

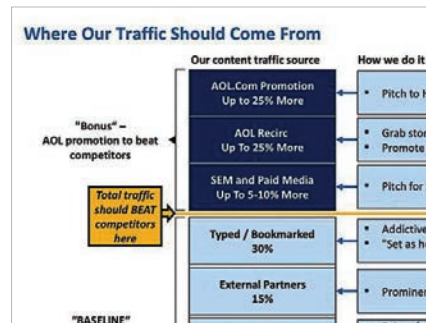
South by Southwest, originally a simple music festival, has grown into one of the world's most important music, film and interactive media conferences. Nearly 12,000 participants descend upon Austin, Texas each March to see some of the industry's biggest names perform and interact with the public. SXSWi, the digital media component, has become famous as a breeding ground where new startups can catch the attention of venture capitalists

as well as the public. This year's highlights include appearances by Mark Zuckerberg and 4chan founder Chris Poole, a debate about the viability of group offer site Groupon, Pepsico announcing a 100 percent plant-based plastic bottle, and TED allowing open access to all its talks and data for developers to use creatively.

COMPANIES

AOL

ISP-turned-wannabe-media-giant AOL has been in the news for all the wrong reasons. In a deal that involved buying out content powerhouse The Huffington Post, Arianna Huffington is now Editor in Chief at the company, whose editorial strategy has come under massive fire after internal documents detailing a new approach to content were leaked. If CEO Tim Armstrong implements his vision of "The AOL Way", there will be a 66 percent increase in the number of stories created, with video jumping from 4 percent to 70 percent of all stories. Search engine optimization will take the forefront, with story selection solely on the basis of traffic potential, ad revenue potential, and overall profitability. Employees must write 5-10 stories per day. As part of the move, hundreds of employees have been laid off, including around 700 in India. Huffington might have made millions, but turning AOL into a mind-numbing content factory isn't likely to help its fortunes very much.



NEW PRODUCTS LAUNCHED

COMPILED BY JAMSHED AVARI

XFX Dual-GPU graphics card

XFX has launched the XFX Radeon HD 6990 dual-GPU graphics card. This high-powered beast creates the ultimate in intense, immersive HD gaming with raw performance, 4 GB GDDR5 high-speed memory and an array of ground-breaking features. As the fastest graphics card in the XFX HD 6000 series the XFX Radeon HD 6990 makes full use of AMD's multiple technologies including Eyefinity, EyeSpeed,



PowerTune and AMD HD3D. The XFX Radeon HD 6990 graphics processor harnesses the power of dual GPUs to unleash flawless image quality and lightning speed performance. The HD 6990 GPU features advanced DirectX 11-capable architecture to enable seamless visuals, allowing the most demanding consumers to power through the most draining applications as well as tap into stunning video quality.

PRICE: Rs 55,000
WEBSITE: www.xfxforce.com

D-LINK Flexible Wireless Router

D-Link has introduced the DAP-1360, a wireless N access point that allows users to connect in different modes and enables them to network with multiple computers. With enhanced levels of security and inbuilt wireless scheduler,



DAP-1360 becomes an ideal product for sharing a wireless Internet connection, surfing the Web, and checking e-mail, documents, music, and photos. The D-Link DAP-1360 offers seven modes of operation, namely Access Point, Wireless Client, Bridge, Bridge with AP, Wireless Repeater, WISP Client Router and WISP Repeater. These modes allow you to flexibly configure the Access Point for use with different wireless applications. An Ethernet port allows you to connect a computer or router to the AP.

PRICE: Rs 4,700
WEBSITE: www.dlink.co.in

BELKIN Powered USB Hub

Belkin has announced a compact and highly durable Hi-Speed USB 2.0 7 port powered desktop hub. This hub adds 7 easy access USB

ports to your PC, Mac or netbook, perfect for connecting external hard drives, printers, smart phones, MP3 players, mouse, keyboard, thumb drives and any other powered USB device to your computer. The Hi-Speed USB 2.0 hub offers easy plug-and-play connectivity for home or business users as they don't require any software or drivers to operate with the host computer.

Simply plug in and add your devices. Belkin's Hi-Speed USB 2.0 hub has a unique design that allows you to connect your devices without conflict/blocking any other USB ports. They come with a transfer speed of up to 480Mbps along with the USB 2.0 cable and a power adaptor.

PRICE: Rs 1,359
WEBSITE: www.belkin.com/in



LG Attractive dual-sim phone

LG Electronics has launched a power-packed handset in the Indian market today.

Loaded with advanced multimedia features, the LG P520 meets all young users' entertainment needs and promises a rewarding mobile experience. Manage your professional and personal life effortlessly with the new LG P520 dual SIM touch screen phone. Its arresting metallic look will soon have all your friends talking. The high-performance 1500 mAh battery ensures that you are always connected, the dedicated SNS client keeps you connected to multiple social networking sites and MSN Messenger, a customizable home screen has dedicated widgets for fast Internet access,

the Opera 5 mobile browser lets you surf at high speed, a high-quality 2 megapixel camera helps you capture your most wonderful moments, and the fun Class UI cartoon theme brings a smile to your face whenever you need one.

PRICE: Rs 7,399
WEBSITE: www.lgindia.com



SENNHEISER Premium audiophile headphones

Sennheiser has introduced the HD 558, which is aesthetically pleasing to the eyes but also provides impeccable sound quality and unrivalled comfort. These beige-coloured open, circumaural headphones come with high-gloss burl wood parts and matching ear pads for a sophisticated, premium finish. With E.A.R.



technology, audio signals are directly channeled into your ears. These headphones also incorporate a special diaphragm geometry that minimizes intermodulation distortion while delivering an impressive frequency response range, plus a compressed cellulose fleece to hold harmonic distortion to less than 0.1%.

And to accentuate the listening experience even further, their high-quality leatherette headband and velour ear pads provide outstanding wearing comfort, even for long listening sessions. The frequency response of 15 to 28,000 Hertz ensures that the listener experiences the full sound range of the music. The headphones are finished in elegant black.

PRICE: Rs 8,990

WEBSITE: www.sennheiserindia.com

SONY

Innovative Compact DSLR

Sony India has launched the SLT-A55V, which adopts

Sony's newly developed Translucent Mirror Technology which offers full-time, TTL phase-detection auto focusing during live view and movie shooting, as well as high speed continuous shooting with continuous autofocus (AF). These features were previously available only on professional grade cameras. Integrating a fixed translucent mirror also results in a more compact body design. The mirror also enables light passing through the lens to be simultaneously received by the image sensor and the auto focus sensor, allowing the world's fastest continuous shooting at up to 10 frames per second with continuous AF. The Exmor APS HD CMOS sensor, BIONZ high-speed image processing engine and



ISO sensitivity (ISO 100-12,800) make it easy to get the best shot. The SLT-A55V has built-in GPS that can tag images with geographical coordinates.

PRICE: Rs 47,990

WEBSITE: ap.sony.com

SAFENET

Sentinel HASP 5.1

SafeNet has introduced Sentinel HASP 5.1, the only software licensing solution on the market that provides method-level protection against reverse engineering of your highly-vulnerable Java2 Enterprise Edition (J2EE) applications. Sentinel HASP Envelop has strong intellectual property (IP) protection features for software built on the Microsoft .NET Framework 4 or 64-bit programming environments. Its Vendor Suite now supports 64-bit programming environments - providing you the tools to quickly and easily implement strong copy protection, intellectual property protection, and more. It

protects application data files used in conjunction with your .NET and Windows x64 applications. HASP HardLock (HL) Keys now start supporting Wine, OpenSuSE 11 & SuSE Linux Enterprise 11, Ubuntu/DEB whereas Sentinel HASP SoftLock (SL)

Keys now also support Snow Leopard Mac OS X 10.6 64-Bit, Windows Embedded Standard (WES) 7.

PRICE: Rs 1,726

WEBSITE: www.safenet-inc.com/SentinelHASP

ACER

Colorful versatile netbook

Acer has opened its doors to a new



The products and services listed here have not been reviewed by IC-CHIP. These are not endorsements or recommendations. All prices, specifications and claims are as stated by the respective manufacturers and publicists.

range of an unexplored colors and tones. Adding to its Aspire range of netbooks, Acer today announced the new Aspire One Happy netbook, a product that combines connectivity and computing with style. The Acer One Happy is available in four delightful colors: Candy Pink, Lavender Purple, Lime Green and Hawaii Blue. The 10.1-inch Aspire One Happy lets you network, play and stay in touch longer, thanks to its 8-hour battery power. Apart from the colours, the LED backlit netbook runs on Windows 7 and allows one to switch comfortably to Google's Android operating system. Google Android offers quick boot and faster access for accessing emails and browsing the Internet. It is powered by Intel Atom N455 processor with 1 GB RAM, and Intel Graphics Media Accelerator 3150.

PRICE: TBA

WEBSITE: www.acer.co.in

WILEY

C# Programming Book

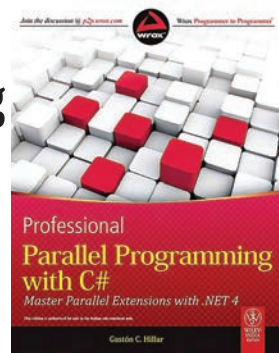
Professional Parallel Programming with C# offers C# programmers easy access to the essentials of concurrent programming along with specific applications. The book dives deep into the newest technologies to create professional parallel applications using C#

4, .Net 4, and Visual Studio 2010. In addition, it teaches other parallel programming techniques like modern SIMD instructions and vectorization (SSE2; SSE3 and SSE4). It also demonstrates the possibilities offered by modern parallel libraries and advanced Intel tools with C#.

PRICE: Rs 599

WEBSITE: www.wiley.com

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ODR: Making E-Commerce Safer

The ability to buy products online has made shopping more convenient than ever before. However, it has also given rise to disputes that could be tricky to resolve.

BY PRIYANKA TILVE

There has been exponential growth in the e-commerce space in India, and seems like every day there are new shopping websites being launched. It's possible to shop for almost anything under the sun online, plus it's quite convenient as you don't have to go hunting for what you want, and you can avoid having to visit crowded malls. What's more, the sites also come up with great offers and deals to lure customers.

On the surface, it appears to be a win-win situation, but shopping online may not always be a hassle-free affair. Solving online disputes could prove to be a little difficult as there is no face-to-face interaction involved, and you may not really know the identity or physical location of the merchant. Even though most of these e-commerce websites have provisions for dispute resolution, the actual process could be tiresome. This is where ODR, or Online Dispute Resolution, comes in.

ODR is a medium of resolving disputes in an online environment. ODRIndia was launched in 2004 and it leverages technology to prevent, resolve and transform disputes. Over the years, it has strengthened its position and has gained the confidence of consumers in resolving online disputes in India. ODRIndia also acts as a third-party tool for eBay and PayPal, amongst others, to assist users in resolving online disputes.

Chittu Nagarajan, the creator and

ODRIndia is a system that leverages technology to prevent, resolve and transform disputes.

co-founder of ODRWorld and ODRIndia, heads the Community Courts of eBay and PayPal. Chittu is a Fellow of the National Centre for Technology and Dispute Resolution, University of Massachusetts, USA. She has a legal practicing certificate and is a trained mediator. We spoke with her to gain an insight into the workings of ODRIndia.

Q How does ODRIndia function?

A ODR can be used in any kind of online transaction, where a dispute

may occur. The beauty of ODR is that, depending on the business and type of disputes, an innovative dispute resolution system can be designed. To understand how ODR works, let's take two examples; an e-commerce online scenario where everything happens in cyberspace, and the offline real world scenario where disputes occur on the ground.

In the e-commerce scenario, when a dispute occurs between a person who buys goods or services and another who sells them, the question is 'how do they resolve such a dispute?' It is not difficult to resolve a dispute when two people are located in the same city. But it becomes impossible to resolve issues when people are located across geographies. Added to this, you have issues such as servers, experts, jurisdiction, travel, cost and processes. ODR comes to the rescue in allowing people to resolve their disputes in the same environment in which it took place. ODR offers dispute resolution software and methods such as negotiation, mediation, arbitration and any other innovative online avenue to help with these disputes.



“ODR India has just begun and we only see ourselves evolving. India has the potential of being at the center of this innovation, as it has the right spirit for improvement and change. ODR brings value and has made a difference to government organizations in the country. Interest, knowledge and innovation are the future of ODR.”

- Chittu Nagarajan,
Head – Community Courts, eBay & PayPal

In every section in the offline world, we are using technology to make life easier and more efficient. However, when a dispute occurs, we seek redress in courts. For every kind of dispute, we run to the courts, thus choking the courts. Courts would require hundreds of years to deal with these cases. Here too ODR can come to the rescue by letting technology bear the burden and helping the courts reduce this backlog.

Q What methods do you employ to resolve online disputes?

A The traditional methods such as negotiation, mediation and arbitration continue to be used. Negotiation is a process where two people talk, sort out differences and reach a compromise without help from a third party. On the other hand, mediation is a process where a neutral third party facilitates the resolution process. The mediator has joint and private sessions with the parties to explore issues and acceptable outcomes. The mediator does not give a verdict, but helps parties reach their own settlement. Finally, arbitration is an informal process where a neutral expert hears both sides like a court hearing and then provides a verdict. It is also possible to have a document-only arbitration without having a hearing. However, a lot of innovation has gone into ODR, resulting in development of ODR software, tools, automated processes and artificial intelligence being deployed to resolve disputes.

Q How do you keep track of communication that has taken place between parties?

A We make backups of databases and software tools to keep track of all communication between parties. ODR systems are designed in such a way that it is easy to communicate, archive and retrieve this communication. For small value disputes or reputation and rating sites, the business may not have the need to archive this communication. In such instances, it is available until the resolution of the dispute.

Q How legally binding is this process?

A This depends on the dispute resolution method. A dispute resolved via negotiation, mediation or

TWO EXAMPLES OF ODR MECHANISMS IN INDIA

EBAY COMMUNITY REVIEW FORUM

Here, a seller can appeal against negative feedback received from the buyer. Once the appeal has been made, the buyer is notified and is allowed to respond to this appeal. The case is then sent to a jury that consists of seven eBay members, who decide if the feedback was justified or not. If the vote is in the favor of the seller, the feedback is removed from his account. On sites like eBay, any negative feedback from the buyer can be detrimental to the reputation of the seller and hence an ODR offers him a fair chance to present his case.

CONSUMER ONLINE AND RESOURCE EMPOWERMENT (CORE) CENTER

It provides an online grievance redressal system for consumer complaints. Here, the consumer can log a complaint after creating an account. For ease and accuracy, there are various categories of complaints. Once the consumer submits a complaint, it will be checked by a Redressal Manager for legitimacy and, if approved, it will be published on the site. An alert is then sent to the concerned party, who is asked to respond to it. The response received will get published below the complaint and an alert regarding the same is sent to the consumer. If the consumer finds the reply satisfactory, the case is closed. If not, the consumer can approach the CORE center and the issue will be taken up with the brand to find a resolution.

other innovative methods is binding as a contract between parties. A dispute resolved via arbitration is enforceable in a court of law. For an e-commerce site, the site can take its own action against its users like suspension, eviction or penalties. The site has the responsibility and duty to retain and safeguard users who comply with their terms and conditions and who abide by their rules in ensuring that it is a safe and trustworthy site to transact and engage on.

Q What is your success rate in resolving disputes?

A Certain companies provide ODR as an in-house service to their customers as this ensures trust, customer satisfaction and retention. In a company

like eBay and PayPal, 90% of disputes are resolved via ODR, which amounts to about 60 million disputes a year. This is a humungous success rate. While in an organization like the Internet Corporation of Assigned Name and Numbers, which is responsible for domain names, its Uniform Domain Name Dispute Resolution Policy resolves all domain name disputes via ODR. Also, once an ecommerce organization implements ODR, the success rate is usually high, as without this mechanism, disputes either get ignored or there is no way of resolving the disputes.

Q Have you seen a rise in online disputes?

A Yes, cases are on the rise because of the nature of the internet, which produces new and innovative sites and businesses every other day. Now, it's all about social commerce and networking, gaming, digital goods, more of the offline coming onto online, the emergence of m-commerce and m-payments. Naturally, these contribute to more disputes.

Q What are most common types of online disputes?

A The most common type of dispute is about items not received, closely followed by items received being different from what was expected. There are also cases involving domain name disputes, merchant ratings and feedback related disputes.

Q What advice will you give shoppers to ensure safe online transactions?

A First and foremost, consumers should ensure that the site is reputed. Do your research well and find out whether the person whom you are transacting with has a good track record. Also, make sure that you know the goods/service tracking details and contact information of the site or seller. Most importantly, read the listings, terms and conditions, and what happens when a transaction goes wrong. There should be an avenue and an easy method to resolve issues when transactions go wrong. Finally, be sure that you are using a safe and secure payment gateway. 

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Chaitanya Surpur

Mobile Number Portability: Port of Distress?

After what seemed like an endless wait, mobile number portability (MNP) was rolled out nationwide in January. A couple of months later, the picture is far from rosy.

BY PRIYANKA TILVE

The much awaited mobile number portability service was rolled out in January this year after a test launch in Haryana in November last year. According to a report from TRAI (Telecom Regulatory Authority of India), by the end of February, about 38.33 lakh subscribers opted for the service. In a country with over 80 crore mobile subscribers, this is still a significant number.

The service allows subscribers to change their service provider while retaining the same number. This is a big draw as many people who were dissatisfied with their service provider would previously grudgingly put up with it solely because they didn't wish to change their number. With MNP, they can easily change their service provider without having to worry about changing their number.

To avail of MNP, all you have to do is send an SMS to 1900 stating your number. After this, you will receive an SMS with a unique porting code. This code is valid for a limited duration; 15 days in most areas, and after it expires, you would have to reapply. Once you decide on the service provider of your choice, you can apply for a connection using this unique porting code. After paying the mandatory Rs 19 as porting fees and submitting all the required documents, your new connection should be active within seven days, which is the stipulated porting time.

You will receive an SMS stating the time and date of porting. On the given date and time, your phone will remain dead for two hours, after which the process of porting will be complete. The downtime does not exceed two hours and takes place

only during the night time. The MNP facility is available to both postpaid as well as prepaid customers and it's possible to switch between GSM and CDMA providers as well.

Roadblocks

While the process seems quite simple, the execution is not without obstacles. People who have tried to port have faced a number of issues, leaving them in a lurch. Take, for instance, the case of Rajiv Patel, who ported from BSNL to Tata Indicom. He says, "I was not satisfied with BSNL mainly because of poor network. As I run a wholesale business, I didn't want to change by number. So when MNP was launched, I decided to shift to Tata Indicom. Everything went fine; I even received the SMS informing me of the time and date when my number would be activated on Tata

Indicom. But when that day arrived, I discovered that BSNL deactivated my number in the morning itself and there was nothing I could do but wait for Tata Indicom to activate my number. Thankfully, my number was activated sometime late in the night. However, the people who tried calling my number couldn't reach me and were informed that this BSNL number has been temporarily disconnected. This continued for a week or two and finally after complaining, my issue was resolved. All in all, it was a nightmarish experience and I even lost some business as people could not reach me."

Rajiv is not alone, as there many who faced similar predicament. Funnily enough, a few others found that their number was active on both service providers. Aditya Soni, who had a Reliance connection ported to Vodafone realized that his number was active in both places. The entire porting process in itself went smoothly other than this minor glitch, which he says went on for about a week. On the other hand, many users found their MNP request rejected due to various reasons, the most common being that they were part

THINGS TO KEEP IN MIND BEFORE PORTING

- ▶ Porting can be done in the same service area only. Mobile numbers cannot be retained for another city.
- ▶ There should be no outstanding payment with your existing service provider.
- ▶ Maximum porting time is 7 days in most parts of the country, except for Jammu & Kashmir.
- ▶ Disruption time while switching of service providers cannot exceed two hours and happens during the night.
- ▶ You will have to wait for a period of 90 days before you can switch again.

of special group plans. Another common ground for rejection was outstanding payment due at the existing provider.

While the scenario looks chaotic, not everyone faced issues with the porting process. Prateek Chakraverty, who had a BSNL connection and switched to Vodafone, says, "I had a BSNL connection and, as you can imagine, the network quality was pretty lousy. Hence, I decided to move to a private player. The MNP process for me took about 10 calendar days (8 business days). But, of course, it depends on the old network operator. If they choose to delay the process, it might take a while, which is 14-21 business days. There would be a "no service" window for about one hour before your number is ported to the new network operator, about which you will

be informed well in advance."

Freebies

With MNP, the power is finally in the hands of the consumer. If they are not satisfied with the service, talk plans, network, etc., they can switch to a different service without having to worry about changing numbers. On the other hand, in this highly competitive market, the service providers are tripping over each other to come up with exciting offers in a bid to retain their customers and woo others. While some have waived off the Rs 19 MNP fees, others are offering free talk time, free SMS, and even a free SIM card. But nothing beats the free pizza offer! Many users simply sent the SMS without ever intending to switch services, just for the free pizza.

Where to Lodge Complaints?

Almost all the service providers have set up dedicated helplines for MNP, but the experience is similar to calling up their regular helpline. It's no guarantee that you will be able to get through, and if you do, you'll probably be put on hold while the executive tries to figure out what's wrong. Seven out of ten times, you will be asked to go to the customer care outlets, where you have submitted your documents. Most of the issues should get resolved at this stage. If not, you can approach the nodal officer of your service provider with the docket number of your complaint. You will find the contact details of the nodal officer on your service provider's website or the TRAI website. As with anything new, there are teething problems that have come to light and TRAI, along with the major players, is keeping an eye on the situation and making amendments wherever required. □

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INDUSTRY VIEW



We are extremely happy with the response we have received. We have made considerable investments in our quality of network and customer service and are geared up with the

technology to enable number portability. We currently have a net port in of over 2.8 lacs as of March 13, 2011. We have been getting complaints that customers who want to port in to us are not getting the unique porting codes (to enable them to port to us) from their existing service providers or there is a delay in the process. It is not appropriate to name any specific operator. As a telecom service provider, we support MNP, which provides an opportunity to the customers to choose whichever operator they want. We want this process to operate smoothly so that maximum choice is made available to the customer. Hence, we have set up a customer care cell to seek feedback with subscribers opting for change.

- **SAMARESH PARIDA**
Director-Strategy,
Vodafone Essar Ltd.

After the nationwide rollout of MNP, Idea is the highest net gainer in many of its leadership circles, such as Maharashtra and Gujarat, and even in circles where it was a late entrant, such as Mumbai, Chennai, Tamil Nadu and Karnataka. As per the MNP results, Idea has already witnessed net gain of 2.6 lakh subscribers as of March 10, 2011. The favorable result can be attributed to Idea's thought leadership position on MNP, which was flagged off under the 'No Idea, Get Idea' brand campaign as a precursor to MNP launch. MNP is a complex exercise involving enormous adjustments in backend operations, network and technology deployment, and setting up systems and processes for the enablement of MNP. With the roll-out of a process of this magnitude, some level of teething problems can be expected initially. Idea has also launched a micro site as well as a helpline for MNP.



- **RAJAT MUKARJI**
Chief Corporate Affairs Officer,
Idea Cellular

SMARTPHONE

HTC HD7

VERDICT: Tremendous potential, but not quite there yet.**FOR:** Well designed, UI is super slick, audio quality is excellent.**AGAINST:** Forces Zune for media transfer, poor battery life, no Flash or Silverlight support.

It's HTC in the lead, bringing us yet another Windows Phone 7 handset – the HD 7. We weren't too pleased with their initial offering, the HTC 7 Mozart. While the handset itself proved to be mediocre at best, the new look and feel of the Windows Mobile UI didn't really do it for us. Having said that, their latest offering had the community very excited, and we were hoping for great things from the HD7.

Form Factor

Taking its cue from big brother, the HTC HD2, the HD7 is pretty much just an upgrade, and in some cases, a downgrade. For instance, while the HD7 is a classier, more elegant and refined looking handset, it's a tad heavier. Like the Mozart, the HD7 doesn't have support for external memory; it'll come in 8 GB and 16 GB configurations. It's a big phone, with a display size and resolution almost identical to the HD2 – 4.3 inches, 480 x 800 pixels. The differentiating factor is that the HD7's display features 16 million colors against the HD2's 65,000.

The physical keys under the display of the HD2 have been replaced with three simple touch-sensitive options – return, a

Windows key, and search. The rear of the handset features a neatly engineered kickstand to prop the handset up in landscape, making it really easy to watch videos. The bundled handsfree, while extremely comfortable



and able to provide excellent quality audio, has the microphone built into the control pad, which is situated too far.

Interface

There's really no change in the HD7's UI from the Mozart's. It's smooth as ever thanks to the 1 GHz Scorpion processor, Adreno 200 GPU, and Qualcomm Snapdragon chipset. At least with HTC's Windows Mobile version of Sense UI, functionality was a lot better even if the layout wasn't so simple. The older Windows Mobile edition looked cluttered and too much like most other smartphone UIs at the time, but WP7 is far more refined. From accessing menus to pinch zoom, it's all very iPhone-esque. It's a fluid UI and the large virtual QWERTY keypad makes for comfortable typing even in portrait mode.

Multi-tasking on the WP7 platform isn't very well thought out since there's really no way you can access apps running in the background other than the music player. The tile system and side scrolling for most menus is easy to navigate, but the lack of an actual home screen could take a little getting used to. There's no way to adjust the background except with a light or dark (white or black) theme and tile color options. Almost anything can be pinned to the desktop, making it somewhat easy to access. Sadly, the entire menu system does not switch to landscape, so if your handset is neatly propped up on your desk, you'll have to manage viewing the desktop, menus page and a few others sideways.

Media

There's just one thing wrong with the handset's media set up – Zune. The fact that there's so much space to play around with, but is restricted to using a proprietary system of data transfer, is just annoying. There's absolutely no issue whatsoever with the audio quality or decibel level in this device. With Dolby Mobile and SRS sound enhancement, the HD7 handles audio output really well. EQ presets are not available within player, but a separate app has been provided. FM radio worked quite well, providing decent reception in most places.

Unlike iTunes, Zune manages to accept all formats, but takes an insanely long time to convert them to the appropriate size and resolution for the device. It's a pity a device with such a fabulously large and clear display has no support for DivX or XviD codecs. There's also no option for stretching videos to fit the screen or viewing them in their actual resolution.

Connectivity

The HD7 supports 3G, EDGE and Wi-Fi with no frills. You can't use it as a Wi-Fi hotspot, neither does it allow for tethering. Bluetooth connectivity is still limited to just A2DP, with no file transfer options. Setting up email accounts is as simple as it is in any new smartphone platform; basic details are required, a verification protocol is run, and that's it. The UI for emails is neat and designed for comfortable viewing. As brilliant as the browsing experience is in IE, it does not support Flash or Silverlight, making the overall experience a little underwhelming. The App Market is not yet available for India, and while there are workaround methods of accessing the store via PC, the apps are pricey and the free ones aren't very impressive.

One of the perks to the WP7 platform is Xbox Live integration. Through the Windows Phone 7 Games Hub, you can access titles from Xbox LIVE

chat applications and the limited availability of the same on the App Market is strange. Bing is, of course, the default search engine, and Bing Maps handle the device's GPS (with A-GPS support) module. There's no Google Maps just yet.

Camera

The HD7's 5 megapixel autofocus camera is provided with a dual LED flash and features scene modes, effects, flicker adjustment, metering and geo-tagging. Image quality isn't as sharp as some of HTC's previous offerings and does appear a bit on the dull side, with colors looking just a tad washed out. At native resolution, details are not really as clear as you'd expect.

Battery

Battery life proved to be a big drawback. With silly tiles being unnecessarily animated, Facebook and emails on push, and the large LCD sucking up power, we needed to charge the HD7 every day, with an average talk time of 3 hours 30 minutes.

Bottom Line

With a price tag of Rs 28,990 (MOP), the HTC HD7 might seem like a great handset, but keep in mind that handsets with far superior capabilities and operating systems exist. The HD7, while a classy piece of hardware, is saddled with an OS that is not yet fully functional. It's still worth keeping an eye on it because it's quite future-proof, but there's no telling how frequently the updates will come. 📱

- Shayne Rana

SPECIFICATIONS

Rs 26,990

www.htc.com/in

Dimensions (WxHxD): **68 x 122 x 11.2 mm**; Weight: **162 g**; CPU: **1 GHz**; Display: **4.3-in, 480x800 pixels**; Camera: **5 MP**; Connectivity: **GPRS, EDGE, 3G, Wi-Fi and Bluetooth**; Rated talk time: **Up to 6 h 20 min.**

CONTACT HTC India
PHONE 9811428765
EMAIL shaurya.vedvyas@brightpoint.com

RATINGS

BUILD QUALITY	★★★★★
ERGONOMICS	★★★★★
FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

as well as your stats and other account related information. Facebook, Google, Windows Live and Twitter account integration with your contacts is quite well fashioned, but the absence of any preloaded





The battery needs to be removed to access the micro SD card even though it seems to be a hot-swap slot.

SPECIFICATIONS

Rs 20,500

www.acer.co.in

Dimensions (WxHxD): 63 x 115 x 13.5 mm;
Weight: 135 g; OS: Android 2.2 (Froyo); CPU: ARM
v7 Snapdragon 800 MHz; Display: 3.6 in 480x800;
Camera: 5 megapixels, RAM: 382 MB; Memory: 185 MB
built-in, 8 GB microSD bundled.

CONTACT	Acer India
PHONE	080-39408700
EMAIL	ailenquiries@acer.co.in

RATINGS

ERGONOMICS	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

SMARTPHONE

ACER LIQUID METAL

FOR: Good build quality, crisp display.

AGAINST: Below average camera, sluggish UI, heating issues, low battery life.

The Liquid Metal is the latest smartphone offering from Acer, and while many smartphones are content with sticking to Android v2.1, this phone runs on version 2.2 (Froyo) out of the box. The phone is powered by an 800 MHz Snapdragon ARM processor and incorporates the Qualcomm Adreno 205 as its GPU. A large 3.6-inch capacitive multi-touch display sporting a resolution of 480x800 delivers crisp quality videos and photos. A 5 megapixel camera with an LED flash can record videos at 30 frames per second and an HD resolution of 720p. The handset also features Wi-Fi N networking, Dolby Mobile Sound enhancement, Acer's own custom UI (Breeze 4.0), and a 1500 mAh battery with estimated talk time of 11 hours.

The phone has an excellent build quality and the battery cover is made of a brush-finished metal (as the name indicates). But as elegant as it looks, the handset didn't manage to woo us as we had expected. There were a couple of flaws that we noticed while using the phone for a few days. Firstly, it feels a bit heavy and the overall grip of the shell is not very comfortable.

The display is less readable in bright daylight, and to add to that, the curved glass tends to reflect the ambient glare from all angles straight into your eyes, making the user experience less than ideal. The display is not scratch and stain resistant either, so you'll have to use it with care. Though the quality of the photos and video is really crisp, the videos tend to skip frames, which is quite irritating. Even the videos encoded to

match the screen resolution suffered.

The 5 megapixel camera's still images were equally disappointing. Images showed noise and looked washed out indoors, and looked just about acceptable outdoors. Videos captured at 720p and 30 fps were extremely jittery. What's worse; it records both MPEG4 and .H264 videos in a 3GP container.

The Breeze 4.0 UI looks classy and rich, but is quite sluggish and confusing. If you are used to the basic Android UI, switching over to the Breeze UI will take you a few days to get accustomed. Luckily, an option to switch over to the basic Android UI is available.

The audio quality was quite disappointing. We found the inclusion of Dolby Sound Enhancement almost useless as the sound quality without the Dolby enhancement was actually better. The phone seems to have a hot-swappable micro SD card slot, but the battery gets in the way, and you need to switch off the phone, remove the battery and then retrieve the card. The rated battery life is quite mediocre. The phone killed the battery after merely five hours of basic use. We also noticed that the back of the handset would heat up a little too much while charging and also when in use.

While the specifications and aesthetics of the Liquid Metal were really tempting, the overall experience was very disappointing. If you are looking for a phone in a similar budget, we would seriously advise checking out other brands. 

- Francis D'sa

VERDICT

AN ELEGANT PHONE WITH MANY FLAWS AND A HEFTY PRICE TAG.

SMARTPHONE

DELL VENUE



FOR: Good looking, sturdy design, AMOLED display, decent battery life, good camera, plenty of handy apps preloaded.

AGAINST: Dell Stage UI was a bit sluggish, audio volume for media was very low.

The Dell Venue is an impressive looking piece of hardware; very refined and aesthetically sound, but at 164 g, slightly on the heavy side. The 4.1-inch AMOLED capacitive touchscreen display sports a 480x800 pixel resolution, making for some blissful Web browsing, video playback and gaming. Since it's encased in Gorilla Glass, there's no need to apply a screen guard. Under the hood of this Froyo-running beast is a 1 GHz Scorpion processor, Adreno 200 GPU, Qualcomm Snapdragon chipset, and 1 GB ROM.

As user-friendly as Dell's Stage UI is, it just didn't seem to be as fluid as Launcher Pro (free off the App Market). There was noticeable lag and jittery motions while scrolling through the menus and multiple desktops with Dell Stage widgets. While overall speed of operation for most functions was good, the accelerometer was just a tad off, and response time while switching orientation was not as fluid as one would want.

Irrespective of what handsfree/earphones we used, the audio quality was just not up to mark. Dell has not provided any audio or video enhancement options with the Venue, but thanks to the Android Market, options are available. In RockPlayer, 720p videos played back spectacularly well and looked fantastic; we only wish we could hear the dialogue. The Kindle app for Android is preloaded, as are Amazon's MP3 downloading app and Del Video Stage. There's also an online radio app called Tunein and the

Zinio Reader app for digital magazines. Social is a widget on

3G, Wi-Fi and EDGE/GPRS are available for Internet connectivity on the Venue. It can also be turned into a portable hot spot and can be tethered via USB to your PC for Internet access. For its GPS module, Dell has preloaded CoPilot Live for navigation. Dell Stage that allows you to connect to Twitter and Facebook, but not both simultaneously. The native browser supports Flash 10.1, so Web browsing is a good experience. The Venue's 8 megapixel autofocus camera is loaded with settings like face tracking, scene modes, white balance, ISO 100 to 800, and panorama. Image quality is quite impressive; colors are well retained and details remain intact at native resolution. The Venue can also capture video up to 720p at 30 fps. Those also managed to come out looking quite good.

The Dell Venue sports a 1400mAh battery that can deliver over five hours of talk time, which isn't overly impressive. On a single charge, you can use the handset quite thoroughly for a little over a day and a half. Videos tend to drain the battery a little too quickly though. With a price tag of Rs 28,990 (MOP), the Venue could have been a serious contender in the Android mobile handset space if it weren't for its ridiculously low volume for media. We'd recommend the Samsung Galaxy S over this. It's got everything and more than what the Venue can offer at almost the same price.

- Shayne Rana



SPECIFICATIONS

Rs 29,990

www.dell.com

Dimensions (WxHxD): 64 x 121 x 12.9 mm; Weight: 164 g; CPU: 1 GHz; RAM: 512 MB; Display: 4.1-in, 480x800 AMOLED; Camera: 8 MP with flash and AF; Video recording: 720p; Connectivity: GPRS, EDGE, 3G, Wi-Fi and Bluetooth.

CONTACT	Dell India
PHONE	1800-425-4026
EMAIL	NA

RATINGS

ERGONOMICS	
FEATURES	
PERFORMANCE	
OVERALL RATING	
VALUE FOR MONEY	

VERDICT

A SERIOUS ANDROID CONTENDER LET DOWN BY SOME MEDIA ISSUES.



MOBILE PHONE

SAMSUNG CHAT 335

VERDICT: Impresses with neat features and an easy-to-use QWERTY keypad.

FOR: Good pricing, easy to use, fast UI, well designed, good camera.

AGAINST: Flap over the USB port missing, average multimedia support.

SPECIFICATIONS

Rs 6,290

www.samsung.com/in

Dimensions (WxHxD): **61.2 x 111.2 x 12 mm**; Weight: **93 g**; Display: **2.4-in, 320x240**; Camera: **2 megapixel**; Connectivity: **GPRS, EDGE, Wi-Fi and Bluetooth**; Rated talk time: **Up to 12 hours**.

CONTACT	Samsung India
PHONE	0124-4881234
EMAIL	rengith.n@samsung.com

RATINGS

BUILD QUALITY	☆☆☆☆☆
ERGONOMICS	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

The Chat 335 is targeted at youngsters who are constantly texting or social networking. It uses a standard QWERTY design, with a nice metallic frame around it. The keypad is laid out well and the optical trackpad is responsive. The operating system is Java-based and while there's nothing out of the ordinary about the UI, it's easy to operate with no lag. The Smart Home option lets you choose from two different homescreen options. The USP of the Chat 335 is its connectivity features. With EDGE and GPRS, surfing the Web is hassle-free. Wi-Fi is available too. Bluetooth works well, and transferring files is quite

fast. Facebook and Twitter apps are preloaded for social networking, as are Yahoo and MSN IM apps. This is not the ideal phone for media users, mostly because of its mediocre display. The 2 megapixel camera delivers satisfactory images. The colors aren't too washed out, but indoor shots don't fare too well. With everyday calls, texting and some media usage, the battery runs for up to two days, which is good. It is priced at Rs 5,800, which seems fair, but it's designed for text-heavy use and social networking and this comes at the expense of camera and multimedia performance.

- Ashish Koshy

SMARTPHONE

MOTOROLA QUENCH XT5

VERDICT: Won't leave you thirsty.

FOR: Solid build quality, great audio quality, good battery life, Gorilla Glass-encased display.

AGAINST: Eclair, with no FroYo in sight.

The candybar XT5 just screams cool! The glossy front houses the high quality 3.2-inch Gorilla Glass encased display. It is powered by a Qualcomm MSM7227 processor and runs Android 2.1 Éclair, which is a bit of a bummer. One might expect the 600 MHz processor to cause a performance bottleneck, but the XT5 performs admirably. The touchscreen is responsive and there's minimal lag. There are three on-screen keyboard layouts and the keys are well spaced out. The video player is decent. It only plays files of resolutions of up to 640x480, but DivX and H264 support is welcome. The Quench shines in the music department. The DAC is high-grade

stuff for a phone in this budget range. It's loud enough and provides good bass and treble levels. There are no EQ settings, but you can get any third-party music player from the Android Market for that. The XT5 supports 3G (HSDPA), EDGE, Wi-Fi and Bluetooth 2.0 with A2DP. Gtalk, MySpace and Facebook apps are preloaded, along with Google Maps for GPS. The 5 megapixel fixed focus camera doesn't do dim lighting well, but the well-lit pictures are decent. The 1270 mAh battery provided talk time of about five hours, with two days of regular usage. At Rs 13,990, the XT5 is quite the sleeper hit and a fantastic mid-range Android option.

- Sriram Gurusathan



SPECIFICATIONS

Rs 13,990

www.motorola.com

Dimensions (WxHxD): **56.8 x 114.9 x 12.6 mm**; Weight: **114 g**; CPU: **600 MHz**; Display: **3.2-in, 320x480**; Camera: **5 MP**; Connectivity: **GPRS, EDGE, 3G, Wi-Fi and Bluetooth**; Rated talk time: **Up to 8h 20 min**.

CONTACT	Motorola India
PHONE	0124-4192000
EMAIL	info.in@motorola.com

RATINGS

BUILD QUALITY	☆☆☆☆☆
ERGONOMICS	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

LAPTOP

LENOVO THINKPAD
L410**FOR:** ThinkPad heritage, ThinkVantage software.**AGAINST:** Outdated hardware, hefty size and weight.

VERDICT

THIS ONE ISN'T SUITED FOR MOST PEOPLE, BUT COULD BE ATTRACTIVE TO CORPORATE HOUSES ON A TIGHT BUDGET.



The L410 is fat and heavy, but at least it has a wide array of ports and options for expansion.

SPECIFICATIONS

Rs 53,460www.lenovo.com/in

Dimensions (WxDxH): 344 x 233 x 41 mm; Weight: 2.32 kg; CPU: Intel Core 2 Duo P8700 (2.53 GHz); RAM: 2 GB DDR3 533 MHz; Hard drive: 160 GB, 5400 RPM; Display: 14-inch 1366x768, LED backlight; Connectivity: Gigabit Ethernet, Wi-Fi 802.11 b/g/n

CONTACT Lenovo India
PHONE 1800-425-3353
EMAIL direct@in.lenovo.com

RATINGS

BUILD QUALITY	☆☆☆☆☆
ERGONOMICS	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

Lenovo's ThinkPads carry a long legacy of rock-solid construction and performance that demanding businesspeople can depend on in any situation. In the past few years, the company has been experimenting with that formula, and the relatively new L series has stripped away many of the hallmark ThinkPad features in order to reduce prices. The L410 has no rollcage to protect its innards or ThinkLight to illuminate your keyboard at night. Expansion capabilities are limited, the legendary ThinkPad keyboard has been compacted and softened, and even the lid latch and 180-degree metal hinges have been dispensed with. What remain are Lenovo's well-regarded ThinkVantage software for corporate manageability and disaster recovery, the red trackpoint in the middle of the keyboard, a matte screen, a sober square black body, and construction that still feels leagues ahead of today's usual shiny plastic.

The L410 is Lenovo's entry-level offering for the corporate space, which is probably a good thing since it offers nothing that the average consumer would demand today. Components such as the Core 2 Duo P8700 CPU, 2 GB of RAM and 160 GB hard drive feel quite antiquated now, and there isn't much beyond the integrated last-generation Intel graphics to get excited about. Don't bother looking for USB 3.0, keyboard backlighting, an HD display, or any sort of aesthetic flourish. There's no doubt that you'll be able to crunch through spreadsheets, presentations and email, but even corporate users today often benefit from having a webcam or at least decent core components. On the plus side, you get HDMI as well as VGA video outputs,

eSATA, an ExpressCard/34 slot, four USB ports, Gigabit Ethernet, fingerprint reader, an SD card slot and a DVD writer. You shouldn't have any problems connecting the hardware and peripherals you need, or configuring this laptop in a corporate environment.

The L410 was clearly never intended to win any beauty contests, but even then, the size and weight are way above average for this class of hardware. At 2.3 kilos and over an inch and a half thick, it won't be very convenient to lug around either. The preloaded ThinkVantage software allows you to boot into a recovery mode, copy data onto an external hard drive, manage passwords, optimize the battery scheme, and of course securely back up your data. Surprisingly, there's a distinct lack of an office suite, antivirus program or any other preloaded software except for Skype, WinDVD and a rather useless app called Lenovo Central, which does nothing but display ads and offer a few Web videos and newsfeeds.

Performance-wise, the L410 slots in comfortably with other laptops that match its configuration, which is to say those from mid-2009 to early 2010. The keyboard and trackpad are a pleasure to use, but battery life was a disappointing 2 hours 49 minutes at idle. We can't compare this laptop to the vast majority of others on the market today, which use Core i3 and i5 CPUs. It's clear that ordinary consumers and well-heeled road warriors should stay away from this, but considering that this is the cheapest full-sized ThinkPad, businesses on an extremely tight budget might find it an attractive, utilitarian option.

- Jamshed Avari

NETTOP

DELL ZINO HD

FOR: Compact design, heat and noise-efficient, Wi-Fi, Good HD video performance.

AGAINST: Top panel is flimsy, no DVI port, no wireless keyboard/mouse, no bundled remote control, expensive.

The Zino HD is designed very well both in terms of looks as well as size. At just 8x8 inches, it's a reasonably compact PC that can be kept anywhere. The build quality is good, but the top panel feels somewhat flimsy and loose. At the front, there are two USB 2.0 ports, a headphone connector and a 4-in-1 memory card reader, all of which are spaced out.

The ports at the back include an Ethernet port, two USB 2.0 and eSATA ports, one HDMI and an SPDIF port, among others. While the Zino HD does have a VGA port, having a DVI out as well would've been handy for those using LCD monitors without HDMI.

Built-in Wi-Fi feature means that you can stream videos, movies and songs over the Internet or from a networked computer or NAS. The Zino HD features a 320 GB 3.5-inch Western Digital hard drive and a DVD drive.

The bundled keyboard and mouse have been well thought of, but Dell should have gone that extra mile and provided wireless options for those looking to use this as an HTPC. Although both peripherals are designed well and are comfortable to use, being able to avoid the cables would have been a big plus. A bundled remote control is also missing.

The Dell Zino HD is no workstation, but it's fast enough to run most of

routine desktop applications.

The performance is better than the dual-core Atoms for sure. It scored 4,480 points in Cinebench, for example, which is almost four times that of a typical dual-core netbook. The Phenom II X3's third core gives the Zino HD the advantage in most CPU intensive applications. The Radeon 5450 discrete graphics solution helps a lot in the graphics performance.

CPU utilization while playing back HD 1080p content is lower than on the recent Brazos platforms. The CPU utilization hovered between 18 and 22 per cent. One of the other things we noticed was that the Zino HD didn't heat up a lot and neither was it very noisy, which is quite an advantage when you're watching movies.

The Dell Zino HD performs fairly well, but with a price tag of Rs 30,900, is it really worth a buy? As an everyday use desktop, it's probably not. You can easily build a decent system for around the same price, but obviously not one of the same size. If you're looking to build an HTPC, the Zino's low power requirements of just 90W and its low-noise, low-heat characteristics should interest you. It is certainly not a bad option to consider. However, if you're looking for something cheaper and if it's just good HD playback you're after, there are some other options, such as the Acer Revo and ZOTAC's Mag HD to consider. 

- Ashish Koshy



The rear panel is well equipped with two eSATA and two USB ports, HDMI, D-sub, audio jacks and an optical S/PDIF port.

SPECIFICATIONS

Rs 30,900

www.dell.co.in

Processor: AMD Phenom II X3 P840; RAM: 2 GB DDR3; Graphics: ATI Mobility Radeon HD 5450; Hard drive: 320 GB; Optical drive: 8X DVD Writer; OS: Windows 7 Home Basic 64-bit

CONTACT	Dell India
PHONE	080-25068026
EMAIL	NA

RATINGS

BUILD QUALITY	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

VERDICT

TOO EXPENSIVE FOR AN HTPC.

MEDIA PLAYER

ASUS O!PLAY MINI

FOR: Full HD playback, compact size, indexing, Dolby 7.1-channel audio out.**AGAINST:** No Ethernet port, single USB port.

The ASUS O!Play Mini is a simple but powerful full HD multimedia playback device, which would make a great addition to your home media setup. Apart from watching high-definition videos on an LCD television using the HDMI interface, the media player can also be used on regular LCD and CRT TVs using the composite A/V output. The O!Play Mini supports full HD 1080p resolution videos in a variety of file extensions, including TRP, MP4, MOV, XVID, AVI, ASF, WMV, MKV, RMVB, FLV, TS, MTS, M2TS, DAT, MPG, VOB, ISO, IFO and M4V. Audio support for formats such as MP3, WAV, AAC, OGG, FLAC, AIFF is also included. JPEG, BMP, PNG and GIF image playback is also supported. You can also have subtitles in SRT, SUB, SMI, SSA, ASS, IDX and TXT formats. File system support for external storage drives includes FAT16/32, NTFS, HFS and EXT3. It additionally features Dolby TrueHD 7.1 channel surround sound for a complete theater-like experience.

The O!Play Mini is as small as a 2.5-inch portable storage drive and boasts great build quality. The shell is made of a dual-tone matte and glossy-finish. The front panel sports inputs such as a USB 2.0 port and a card reader, which supports SD, MMC, MS and xD flash cards. The rear features HDMI and composite audio and video interfaces and an optical S/PDIF port. What the O!Play Mini lacks is an Ethernet port, which could support media streaming over the Internet or media servers on

the local network. Also, an additional USB port would have been beneficial for external 2.5-inch storage drives that require a Y-cable for additional power. The player has absolutely no control panel whatsoever, so you have to rely on the bundled IR remote, which supports all the functionality. So in case you lose or damage the remote, the media player would be almost useless unless you acquire another remote controller from the manufacturer. We found the interface very user friendly, easy to navigate and quite swift while changing between screens, but it can be a little sluggish of the list of movies is too long.

The video playback was almost flawless. The indexing feature is beneficial, especially when you plug in a fairly large storage drive with lots of video, music and photos. The lack of USB 3.0 port, which is present in the HD2, was a little disappointing, but since the requirements of speed are not as high, it could be ignored. The O!Play Mini offers great value for money and is the cheapest HD media player you can buy with these features. 

- Francis D'Sa



The rear panel sports composite, HDMI and S/PDIF ports, but does not feature any additional USB 2.0 or USB 3.0 port.

 VERDICT

ONE OF THE CHEAPEST HD MEDIA PLAYERS MONEY CAN BUY.

 **SPECIFICATIONS****Rs 4,400**www.asus.in

Dimensions (WxHxD): **151.8x29x1.7 mm**;
Weight: **175 g**; Video resolution support: **Full HD 1080p**;
Video output: **HDMI 1.3, Composite AV**; Audio output:
Stereo, optical S/PDIF; Storage interface: **USB 2.0 x 1**,
MMC card reader.

CONTACT	Asus Technology
PHONE	022-67668800
EMAIL	reachus@asus.com

 RATINGS

BUILD QUALITY	★★★★★
FEATURES	★★★★☆
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

IPOD DOCK

HARMAN KARDON GO + PLAY MICRO

VERDICT: There's nothing micro about this dock.**FOR:** Very nice design, great sound, video output via composite cable.**AGAINST:** Not loud enough, expensive, docking station could've been better.

Harman Kardon's Go + Play Micro iPod dock comes with a remote that lets you browse through your iPod/iPhone menu, but that's pointless as the screen faces upwards, so you can't really see what's on it. The dock feels a little confined; with the case, our iPhone 4 refused to fit. Apart from the usual auxiliary inputs, it also has a composite video out. We could streaming 720p YouTube videos without any problems. Strangely, the EQ and FM radio features are missing. The Go + Play Micro also runs on batteries, but it takes eight C-cell

batteries to power it. The dock has four tweeters and a woofer at the bottom. We love the sound; everything is clear and upfront. It doesn't even distort at maximum, but it could have been a lot louder. Apart from the power, this dock sounds delicious with all genres of music. It is definitely one of the best docks we've heard. The 'Micro' tag is confusing, because all that has shrunk is the feature set and sound level. While we loved the dock, others like the Logitech S715i are cheaper and louder. 🇮🇳

- Siddharth Basrur



SPECIFICATIONS

Rs 14,990www.accessinfoworld.com

Dimensions (WxHxD): **9 x 9.5 x 20 inches**; Weight: **1.8 kg**; Power output: **60 W**; SNR: **85 dB**; Connectivity: **Line-in, S-video out**.

CONTACT	Access
PHONE	022-23840789
EMAIL	accessinfoworld@vsnl.com

RATINGS

BUILD QUALITY	★★★★★
ERGONOMICS	★★★★★
FEATURES	★★★★☆
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★☆



MOTHERBOARD

GIGABYTE GA-E350N-USB3

VERDICT: The ideal HTPC platform.**FOR:** Compact size, low temperatures, flawless 1080p video playback.**AGAINST:** Single PCI-E x4 slot, somewhat expensive.

The Gigabyte E350N-USB3 is a mini-ITX board with the trademark blue coloured PCB. There's a hefty heatsink and fan seated on top of the processor, which seems overkill for the low-powered processor. It's nice to see features like SATA 3 and USB 3.0 in a low-powered platform. Space is a constraint, but a PCI-E x16 sized slot has been squeezed in. Sadly, it only functions as a PCI-E x4 slot. Apart from the D-Sub and DVI ports, there's an HDMI port, which is handy for HTPCs. The 24-pin power connector lines one side, with two DDR3 memory slots close to it. The PCI-Express slot is away from the RAM slots and the SATA ports are placed above the PCI-E slot, so the card won't

blocking any slots. This board uses solid state capacitors. Cinebench rendering scores were double that of netbooks on Intel's Atom. The same performance was seen through the video encoding and file compression tests. Videos at 1080p ran flawlessly and CPU utilization didn't cross 25 per cent with the video running. Temperatures were very low during the tests as well. The new Fusion APU is an improvement over previous low-power processors, but the platform itself is a more feature-rich product. Priced at Rs 8,900, it's not as cheap as Intel's offerings, Nvidia's Ion platform worked well, but with Brazos entering the market, there's now more choice. 🇮🇳

- Rossi Fernandes and Ashish Koshy

SPECIFICATIONS

Rs 8,900www.gigabyte.in

Processor: **AMD E-350**; GPU: **AMD Radeon HD6310**; Memory: **Up to 8 GB**; Audio: **Realtek ALC892**; Expansion slots: **1 x PCI Express x16**; SATA | USB 2.0: **4 | 8**; USB 3.0: **2**; Video outputs: **D-sub, DVI and HDMI**.

CONTACT	Gigabyte Technology
PHONE	022-40633222
EMAIL	sales@gigabyte.in

RATINGS

FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★☆



GRAPHICS CARD

ASUS GTX 570 DIRECT CU II

VERDICT: Would you sacrifice your expansion slots for this card?

FOR: Very good cooling, excellent performance.

AGAINST: Bulky triple-slot design.

The Asus GTX 570 Direct CU II resembles the HD 6950 Direct CU II because of its mammoth cooler and metal shroud. The Direct CU II cooler is the biggest we've ever come across on a graphics card. The copper heatpipes running through the heatsink come in direct contact with the GPU for efficient heat dissipation. There are two heatsinks

under the metal shroud.

One is fitted over the GPU with two heatpipes running through it and one is interconnected by three heatpipes. All five heatpipes come in direct contact with the GPU. With just the heatsink, this card is 35 mm thick and with 90 mm fans fitted over each heatsink, the thickness is a whopping

SPECIFICATIONS

Rs 25,000

www.asus.in

GPU: GeForce GTX 570; Memory: 1280 MB GDDR5; Memory bus width: 320-bit; Speed (Core | Memory): 742 MHz | 950 MHz; Stream processors: 480; Video outputs: Dual-link DVI, HDMI and DisplayPort.

CONTACT	Asus Technology
PHONE	022-67668800
EMAIL	reachus@asus.com

RATINGS

FEATURES	★★★★☆
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★☆

60 mm. The card requires three slots, so you'll have to sacrifice the expansion slots that come in its way. The reference design of the GTX 570 draws power from two 6-pin PCIe power connectors, whereas this card uses a 6-pin and an 8-pin connector. Performance is similar to that of a stock GTX 570. It reported a score of 21441 in 3DMark Vantage and gaming performance was excellent. At 1920x1080 in Crysis' Enthusiast mode, gameplay was smooth at 41 fps. Mafia II ran at 35 fps. If you're ready to sacrifice your expansion slots, this card is for you.

- Anand Tuliani

GRAPHICS CARD

ASUS GTX 560 Ti
DIRECT CU II TOP

FOR: Factory overclocked, excellent custom cooler, very good performance.
AGAINST: None.



The GTX 560 Ti is currently offers the best bang for the buck in the sub-Rs 15,000 mid-range segment. It's a lot more powerful than the GTX 460 and even defeats the new Radeon HD 5870. We tested a few retail samples of the GTX 560 Ti from various manufacturers when they were new to the market and each card featured a custom design. The Asus GTX 560 Ti Direct CU II Top also sports a custom design and the suffix 'Top' indicates that this card is factory overclocked.

First up, the card uses the new Direct CU II cooler, which Asus has been using on many of their latest releases. The cooler comprises of two aluminium heatsinks interconnected by three 8 mm copper heat pipes, which dissipate the heat from the graphics processors. Each heat sink is cooled by a 75 mm fan. The heatsink fitted on top of the GPU is much denser than the one next to it and the fan fitted over pulls in more air than the other. The shroud is of metal and the overall

build quality of the cooler is excellent. The length of the PCB is 230 mm and the shroud adds another 20 mm, which makes it 10 inches in length. So it should just about fit mid-tower ATX cabinets.

The GPU runs 9.3 percent faster than the stock speed of 823 MHz, and the memory is clocked at 1050 MHz, which is 4.8 percent faster. This boost helps the card churn out 3 to 5 fps more in most games. The card scored 19418 points and 4549 points in 3DMark Vantage and 3DMark 2011 respectively. We ran a few game benchmarks at 1920x1080 using Very High settings and the overall performance was very good. With 4xAA enabled, Crysis Warhead ran at 33 fps, and Mafia II ran at 35 fps with PhysX set to maximum. This card defeats the Radeon HD 6870 and the performance is at par with the Radeon HD 6950.

Considering the average price of Rs 16,000 for a stock GTX 560 Ti, this card is an excellent bargain. 🇮🇳

- Anand Tuliani



The mini DP ports, HDMI and DVI can all be used simultaneously for a multi-monitor setup.

SPECIFICATIONS

Rs 17,000

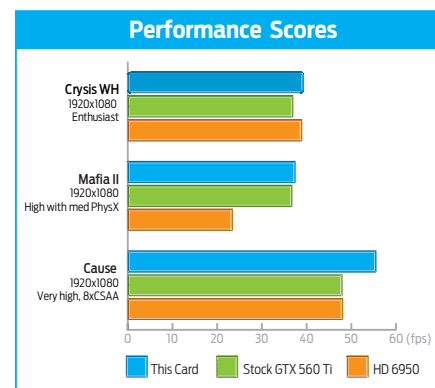
www.asus.in

GPU: GeForce GTX 560 Ti; Memory: 1 GB GDDR5; Memory bus width: 256-bit; Speed (Core | Memory): 900 MHz | 1050 MHz; Stream processors: 384; Video outputs: Dual-link DVI and mini-HDMI.

CONTACT Asus Technology
PHONE 022-67668800
EMAIL reachus@asus.com

RATINGS

FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★



VERDICT

A SUPER-CHARGED GTX 560 Ti WITH AN EXCELLENT COOLER.

GRAPHICS CARD

XFX RADEON HD 6970

VERDICT: Good performance at an outrageous price.

FOR: The reference design is effective and silent, good performance.

AGAINST: Very expensive.



The Radeon HD 6970 GPU features a full-blown Cayman chip with 24 shader clusters. Each cluster has 64 shaders, which makes up a total of 1536 shaders. The core is clocked at 880 MHz and the memory is clocked at 1375 MHz (5500 MHz effective). The GPU has four 64-bit memory controllers, so the GPU connects to the memory via a 256-bit wide bus. The card comes with 2 GB GDDR5 memory. It sports AMD's reference design and runs at stock speeds, so the cooler is a vapor chamber one, which uses evaporative cooling instead of conventional heat pipes. The vapor chamber has an aluminum heatsink fitted over it for dissipating heat. The blower next to the heatsink cools the

fins and hot air is expelled from the rear vents. The plastic shroud has a cutout for the blower and completely packs the cooler to channel air through the fins. The rear sports two dual-link DVI ports, two mini-DP ports and an HDMI port. Three of these can be used at a time using Eyefinity. Performance is quite similar to the GeForce GTX 570. It scored 20533 and 5146 in PCMark Vantage and PCMark 2011 respectively. At 1920x1080, it managed 43 fps in Crysis Warhead (Enthusiast) and 65 fps in Mafia II. The tessellation performance was almost at par with GTX 570, but it struggled with PhysX. We'd opt for the GTX 570 instead, which has a market price of about Rs 23,000. 🇮🇳

- Anand Tuliani

SPECIFICATIONS

Rs 37,000

www.rptechindia.com

GPU: **Radeon HD 6970**; Memory: **2 GB GDDR5**; Memory bus width: **256-bit**; Speed (Core | Memory): **880 MHz | 1375 MHz**; Stream processors: **1536**; Video outputs: **Dual-link DVI, HDMI and mini-DisplayPort**.

CONTACT	Rashi Peripherals
PHONE	022-40470828
EMAIL	response@rptechindia.com

RATINGS

FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★



The height is adjustable and the screen can be rotated 180 degrees to work in portrait format.

SPECIFICATIONS

Rs 45,000

www.ap.viewsonic.com/in

Dimensions (WxHxD): **23.4 x 18.4 x 15.3 inches**;
Weight: **11 Kg**; Screen size: **26-inch**; Resolution:
1920x1200; Response time: **5 ms**; Refresh rate: **85 Hz**;
Interfaces: **DVI and VGA**.

CONTACT Viewsonic Technologies
PHONE 011-42603195
EMAIL kuldeep.ramaliya@in.viewsonic.com

RATINGS

BUILD QUALITY	★★★★★
FEATURES	★★★★☆
PERFORMANCE	★★★★☆
OVERALL RATING	★★★★☆
VALUE FOR MONEY	★★★☆☆

DISPLAY

VIEWSONIC VP2655WB

FOR: Good color reproduction, sturdy design, decent viewing angles.

AGAINST: Expensive, needs calibration, average blackness levels.

The Viewsonic VP2655wb uses a 1920x1200 resolution IPS panel, which is of the 16:10 aspect ratio instead of the usual 16:9. The display only comes with a DVI and a D-Sub port. For a display of this sort, we could've used an additional DVI or HDMI port. There's USB connectivity as well, so you can use four ports to connect flash drives and other devices.

The display comes with a height-adjustable stand design, which also swivels and rotates. It's welcomed, since it makes the portrait view possible. The motion isn't as fluid as on a high-end NEC display, for example. Still, the feature itself is pretty rare to find in monitors these days. The onscreen display is the standard design found on most Viewsonic monitors. It is intuitive and simple to use. It's also quite customizable; you can change the timeout period for the menu and also its position on the screen. There are a few power saving modes, which do nothing but adjust intensity of the backlight. Although brightness and contrast settings are present, there are no other dedicated backlight controls.

The build quality is commendable. We found the stand to be extremely sturdy, but it takes up a lot of space due to its large three-legged design, which means that the screen can't be pushed right back against a wall unless you choose to wall-mount it. The feet of the stand are

layered with a rubberized material that prevents movement. The buttons are of average quality and there are no fancy designs and backlighting features that you would find on a mainstream displays. The only light besides the display comes from the power button indicator.

The color reproduction quality really shows when you power on the VP2655wb. There are no patches within gradients which is generally a good sign. There's no noise either. The colors are oversaturated at first and the display has to be calibrated thoroughly before use. The reds were clearly the gaudiest of all the colors. Backlighting was even, but we felt that the black levels weren't up to the mark. The dark areas were still pretty grey no matter how much we tweaked the settings. Still, blackness levels were better than you would find on a TN panel. Viewing angles were decent. We noticed no input lag, so this monitor can also be used for gaming. Movie clips and animations showed no blurring or shadow effects either, which makes the display ideal for all kinds of multimedia.

The Viewsonic VP2655wb is a no-nonsense display with its Plain Jane look. Apart from a few quirks, we're pretty impressed by its performance. It sells for approximately Rs 44,999, which is quite expensive even for a 27-inch display, but if you're in the market for a good quality panel, it is an option to consider.

- Rossi Fernandes

VERDICT

GREAT PERFORMANCE, BUT FOR A HEFTY PRICE.



The front features a card reader and PictBridge port for instant printing from flash cards, USB or a camera.

SPECIFICATIONS

Rs 25,995

www.canon.co.in

Dimensions (WxHxD): **470 x 199 x 392 mm**;
Weight: **10.7 Kg**; Print resolution: **9600x2400 dpi**;
Scan resolution: **4800x4800@48 bits**; Connectivity: **USB 2.0, WLAN, Ethernet 10/100**.

CONTACT	Canon India
PHONE	0124-4160000
EMAIL	NA

RATINGS

BUILD QUALITY	★★★★★
FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★☆

MULTI-FUNCTION DEVICE

CANON PIXMA MG8170

FOR: Excellent print quality, touch control panel.

AGAINST: Highly glossy shell, average print speeds.

The Canon Pixma MG8170 is a multi-function printer suited for homes or small to medium-sized enterprises. It has a rugged build, but the entire shell is made up of an extremely high-gloss surface, which

attracts dust and fingerprints quite easily.

The MG8170 lacks a fax option and does not sport an ADF either. It features wireless networking, which allows network sharing via a wireless router and can even be used to directly print from an iPhone or Playstation 3. Other interfaces include an MMC card reader and PictBridge for cameras and flash drives. Interestingly, Canon has brought back the Infrared technology (IrDA), but uses IrSimple IrDA technology which is around 10 times faster than the regular IrDA protocol. So a single photo can be transferred from a mobile instrument in around one second. An optional dongle can be used for Bluetooth connectivity.

The printer employs a total of six cartridges for printing (grey ink has been

added besides black, and C, M, Y and K), unlike other printers, which use only five cartridges. The grey color reduces the amount of black ink used in the photos, thus increasing the overall yield of the ink tanks, especially the black tank. The MG8170 prints at resolutions of 9600x2400 dpi (1 pl ink-drop technology), delivering crisp and vibrant photos. You can also print borderless A4-sized photos on this printer. The top of the MG8170 is where the entire printer can be operated from. The scanner lid doubles up as the control panel, which features a 3.5-inch color display along with a touch sensitive backlit D-pad.

The user interface, along with the touch sensitive control panel, is quite responsive and menu navigation is pretty simple.

The paper output tray is automated and opens automatically when a print command has been initiated, reducing the chances of paper jam. An auto duplex feature along with dual input paper feeding (top loading and bottom tray) makes printing even more user friendly. The ChromaLife 100+ technology allows your pictorial memories to last for almost 300 years. The MG8170 can also print labels directly onto CDs and DVDs. On the performance front, the printer prints at average speeds of 13 pages per minute while a borderless 4.6-inch photo can be obtained in 20 seconds. 

- Francis D'sa

VERDICT

THE PIXMA MG8170 HAS A GREAT FEATURE-SET BUT IS PRICE HEAVY.



DOCK

CREATIVE ZiiSOUND D5

VERDICT: Lots of style, but for a price.

FOR: Stylish, easy Bluetooth syncing, bundled dongle, good sound.

AGAINST: Expensive, distortion at high volume.

SPECIFICATIONS

Rs 17,999

in.creative.com

Dimensions (WxDxH): 16.7 x 4.3 x 3.6 in; Weight: 3.8 kg; Frequency Response: 2.4 GHz; Connectivity: Bluetooth, auxiliary in

CONTACT	Creative Technology
PHONE	9223101322
EMAIL	india_getcreative@ctl.creative.com

RATINGS

BUILD QUALITY	★★★★★
ERGONOMICS	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

The D5 oozes style with its sleek black rectangular design and compact form. The front has just a feather-touch button for Bluetooth connectivity, with another one on top for volume control. The back has an auxiliary input for non-Bluetooth devices. Using the D5 was a breeze and syncing both Apple and non-apple devices is quick and hassle-free. We really like the bundled Bluetooth dongle provided for older generation iPods. There's no speakerphone function; when a call comes in, the music just stops, and then resumes once you hang up. As long as you don't pump the music level all the way up, the D5 sounds great. Anything above 75% and it starts to distort. It also sounds a little too bass heavy, which doesn't quite work out in such a small speaker. The sound is pretty good overall, but at Rs 17,999, it's way too expensive.

- Siddharth Basur



ACCESSORY

WICKED TOUR

VERDICT: Great sound for the price, but test them before you buy them.

FOR: Great reproduction of current pop music.

AGAINST: Looks and plastic quality aren't for everyone.

SPECIFICATIONS

Rs 2,190

www.accessinfoworld.com

Drivers: 40mm; Impedance: 32 Ohms; Frequency response: 20-20,000 Hz; Cord length: 1.2 m; Inline Controls: call/end button

CONTACT	Access
PHONE	022-23840789
EMAIL	accessinfoworld@vsnl.com

RATINGS

BUILD QUALITY	★★★★★
ERGONOMICS	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

Wicked Audio's Tour headphones are clearly designed for youngsters. These foldable on-ear cans come in a variety of colors with "street"-inspired graphics and faux-chrome. The foam pads are thick and soft, but like most on-ear designs, seal your ears off while leaking sound to everyone around you. The cord is short enough for outdoor use without getting in the way, but the plastic headband feels too delicate. There's an inline mic with a call/pause button for use with phones, but sadly no volume controls. Low frequencies are heavily exaggerated, but perfectly clear. Percussion instruments are amazingly rich and crisp. However, voices in higher ranges lose their distinctiveness and layered sounds get too muddled. Urban pop and house sound best, while lighter jazz and even soft rock just feel hollow.

- Jamshed Avari



EXTERNAL STORAGE

IMATION DEFENDER H200 +BIO, 500 GB

VERDICT: An excellent solution for storing highly confidential data.

FOR: Rugged build, extremely secure, multiple user accounts.

AGAINST: The read/write speed should have been better.

SPECIFICATIONS

Rs 19,500

www.imation.com

Dimensions (WxHxD): 86.3 x 28 x 124.4 mm; Security: Biometric (fingerprint) and password; Capacity: 500 GB; Interface: USB 2.0.

CONTACT	Imation India
PHONE	011-40576290
EMAIL	knair@imation.com

RATINGS

BUILD QUALITY	★★★★★
FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

The Defender H200 +Bio isn't just a rugged portable hard drive. It also features hack-proof biometric and password protection for confidential data. You must first create an admin account and then up to 10 user accounts. You can impose stringent password policies; define the retry limit, password length, and number and nature of characters depending on how complex you want the password to be. The admin can also specify the biometric retry limit, and after failed attempts, the user account can be locked or the data can be destroyed. It is equipped with a fingerprint scanner and status LEDs. We transferred an assortment of files to the drive and read the same. Average read speed was 20 MB/s and the write speed was 19.5 MB/s; good for a portable drive.

- Anand Tuliani



ROUTER

D-LINK MYPOCKET ROUTER DIR-457

VERDICT: A handy device to have when there aren't any Wi-Fi hotspots handy.

FOR: Versatile, allows multiple Wi-Fi connections.

AGAINST: Expensive, poor battery life.

SPECIFICATIONS

Rs 8,300

www.dlink.co.in

Dimensions (W x D x H): **110 x 13.6 x 65 mm**; Weight: **103 g**; Cellular standards: **GSM 850/900/1800/1900 MHz, HSDPA, HSUPA**; Security: **WPA-PSK, WPA2-PSK**; Storage: **microSD, upto 8 GB**

CONTACT	D-Link India
PHONE	022-29215700
EMAIL	divya.shetty@dlink.co.in

RATINGS

BUILD QUALITY	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

With 3G rolling out across the country, D-Link's MyPocket router could be just what road warriors need. Instead of an inconvenient dongle, it lets you create your own Wi-Fi hotspot and connect to it using any device. It's ideal for users of older smartphones, Wi-Fi-only tablets, or those who want to connect multiple devices at once. The DIR-457 can be used as a regular USB 3G modem to preserve battery life, and can also host up to 8 GB of shared storage using a microSD card. The unit ships with a slipcover and USB charger, but no printed manual. A dialer utility self-installs when you plug it in via USB for the first time. Advanced configuration can be done through a Web interface. In use, Wi-Fi range was impressive, but it was difficult to catch 3G signals indoors. 📶

- Jamshed Avari



ACCESSORY

X-MINI V 1.1 CAPSULE SPEAKER

VERDICT: Extremely disappointing.

FOR: Small and compact, features like the lid and crevice are well thought out.

AGAINST: Expensive, average sound quality with terrible high tones, vibrates a lot.

SPECIFICATIONS

Rs 2,499

www.accessinfoworld.com

Dimensions: **50 x 65 x 50 mm**; Weight: **58 g**; Power output: **2 W RMS**; Freq Response: **120 Hz - 20 KHz**; SNR: **89 dB**; Battery life: **6 hrs**.

CONTACT	Access
PHONE	022-23840789
EMAIL	accessinfoworld@vsnl.com

RATINGS

BUILD QUALITY	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

The V 1.1 sports a capsule design with a neat rubberized finishing. The bottom has a small crevice to house the 3.5 mm audio cable. The base has the volume wheel, a 3.5 mm audio jack and a mini-USB port for charging. The speaker is compatible with PMPs and almost anything that uses a 3.5 mm audio jack.

The sound quality didn't meet our expectations. The sound was shrill and although it can get pretty loud, the distortion is easy to notice. For a speaker of this size, the base is decent and the mids are manageable as well, but you wouldn't want to turn up the volume too much because, distortion aside, the speaker vibrates and starts to move. Being a single unit, the V 1.1 is portable, but at Rs 1,249, its performance is well below par. 📶

- Ashish Koshy



OPTICAL DRIVE

BUFFALO PORTABLE BLU-RAY DRIVE

VERDICT: The ideal upgrade from your laptop's DVD drive.

FOR: Portability, high speed, compact design.

AGAINST: High gloss surface, below average build.

SPECIFICATIONS

Rs 14,000

www.buffalo-asia.com

Dimensions (WxHxD): **137 x 20 x 142 mm**; Weight: **340 g**; Write speed: **Blu-ray-6x, DVD-8x, CD-24x**; Interface: **USB 2.0**.

CONTACT	Buffalo Inc.
PHONE	011-41538059
EMAIL	info-india@melcoinc.co.jp

RATINGS

BUILD QUALITY	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

Buffalo's portable Blu-ray writer is great for those who wish to watch Blu-ray titles on their laptops or take backups as large as 50 GB on a single disc. The unit is as slim as a laptop's internal optical drive, but has a below average build and a glossy black shell which easily attracts dust and fingerprints. The unit is backed by a two-year warranty and comes with a Y-USB cable and a power adapter for the necessary power requirements, which is beneficial for PCs/laptops which don't have a spare USB port. IT professionals who require constant backups to be taken from multiple servers located in different locations can benefit from this add-on. One can store up to 6 hours of HD video or 20 hours of DVD quality video content on a single dual-layer Blu-ray disc. 📶

- Francis D'Sa



Entertainment **Anywhere**

With a media player as small as a matchbox, you can play your favourite flicks anywhere and anytime. We bring together 23 portable media players to find out which one is a true entertainer.

BY ANAND TULIANI AND FRANCIS D'SA

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MP3 players and portable media players are ideal travel companions for music lovers and movie buffs. You can carry your entire music library and favourite movies on one pocketable device. Mobile phones also offer good media playback, but you don't want to run out of battery power on your phone because of it.

That's where portable players come in. Today, you can buy a large-screen player with plenty of storage space for under Rs 5,000 thanks to emerging brands like Zebronics and Yes. Such super-affordable players are giving big brands a run for their money. However, high-end portable media players have become more compact and versatile. Watching videos on the iPod Touch's Retina display or the Cowon J3's AMOLED display is a sheer treat. The iPod Touch is the first to feature a camera with 720p video recording. Some players also featured an FM transmitter and Bluetooth A2DP technology for wireless listening. In this roundup, we tested 23 music and video players spanning all budgets and form factors. Read on to find out how we tested them and which ones emerged as the cream of the crop.



TEST PROCESS

Analyzing and comparing MP3 players and portable media players might seem pretty simple, but the process involved is actually quite tedious simply because they vary so drastically in size, form factor, functionality and features. Each player has to be analyzed on the basis of its features, build quality, ergonomics and overall performance. After evaluating these aspects for each player, we score it and evaluate it against its competitors within the same segment to arrive at the best of the lot. Let's have a quick rundown of what these tests consist of.

FEATURES: Every portable player is different. For example, if some players can entertain you with just music and video, others let you surf the Internet, play motion-controlled games, and read e-books. In this section, we noted the feature sets of all players as well as characteristics such as dimensions, weight, storage capacity and expansion type, display size and type, supported media formats, audio equalizations, and battery life. Additional features beyond the players' core functionalities, such as audio recording, networking, games, A/V out, e-book reader, and built-in speakers were also noted. Finally, we evaluated the aesthetics of each player. The player's versatility depends on its feature set. So this section was allotted the highest weightage.

BUILD QUALITY: This section deals with the quality of the player's overall construction and that of the bundled earphones. We also paid close attention to the sturdiness of the buttons. Since these players require lots of user control, the shell's resistance to fingerprints and scratches and the presence of port flaps was also noted.



You can expand the existing storage capacity by up to 16 GB using a memory card.

ERGONOMICS: This is one of the most important sections, as it determines the overall usability of the player. Quick and user-friendly operation goes a long way towards improving the overall user experience. This section highlights the size, spacing and tactility of the buttons, the type of navigation aids present, ease-of-operation, and the player's overall grip.

PERFORMANCE: Gauging the performance is often the most tedious part of any test process, and that was certainly the case here. We loaded each player with music, movies and photos (we transcoded audio/video and converted photos to the respective players' file formats and specifications) to analyze the audio, video and image performance. Audio quality was scrutinized across various genres of Indian and international music, while display quality was tested using both video and images. We also analyzed the quality of the built-in speakers and the bundled earphones. Finally, we allotted points for the screen's viewing angle and the overall smoothness of the user interface.

WARRANTY: Portable devices, which we tend to carry around extensively, are subjected to lots of rough use, and because we use them constantly, anything could go wrong. So it helps when the device is backed by a reassuring warranty. Products that offered extensive warranty from their manufacturers gained higher points.

VALUE FOR MONEY: Lastly, the product that offered a blend of all the above aspects at the lowest possible price (in comparison to others in its segment) was awarded Best Value.

- anand.tuliani@chip.in

francis.dsa@chip.in



Players with large screens should use touchscreens instead of only buttons for operation.

MP3 PLAYER

ZEBRONICS ZEBMATE 20



SPECIFICATIONS

Rs 1,350

Dimensions (WxHxD): **26 x 70 x 12 mm**; Weight: **21 g**;
Capacity: **2 GB**; Display: **1 in LCD**; File support: **MP3, WMA, WAV**;
Battery life: **20 hrs**.

CONTACT
PHONE
EMAIL

Top Notch Infotronics India Pvt Ltd
044-43936000
enquiry@zebronics.info

RATINGS

BUILD QUALITY	☆☆☆☆☆
ERGONOMICS	☆☆☆☆☆
FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆

The Zebtronics Zebmate 20 won the Best Value title purely because of the audio performance and the lowest price tag. It is a simple MP3 player the size of a thumb and has enough storage space for approximately 500 songs (2 GB) with a 20-hour continuous playback battery life. The overall build quality is just average; the glossy shell can get scratched easily, but the shell is tough enough to handle shocks from accidental falls. On the ergonomics front, the buttons are quite tacky and the sluggish user interface along with the tiny D-pad can make operating the player quite annoying. With a really sluggish user interface, it is best to create a playlist and leave the player untouched. Some good extra features are voice recording and a text reader. To our surprise, the player performs quite well. It scored above-average in our tests and outperformed the Apple players in its category. The bundled earphones are comparatively good and you won't need to change them unless you prefer your personal earphones.

VERDICT: A basic PMP with good sound and the lowest price..

FOR: Good audio quality, cheap, voice recording.

AGAINST: Bad ergonomics, sluggish UI.

PMP PLAYER (SMALL SCREEN)

COWON iAUDIO 9



SPECIFICATIONS

Rs 8,000

Dimensions (WxHxD): 43 x 95 x 8.9 mm; Weight: 40 g;
Capacity: 8 GB; Display: 2 in TFT 240x320; File support: MP3,
WMA, FLAC, Ogg, WAV, DivX, WMV, JPG; Battery life: 29 hrs
audio, 7 hrs video.

CONTACT Lipap Systems Pvt Ltd
PHONE 9819917440
EMAIL info@cowonindia.in

RATINGS

BUILD QUALITY	★★★★★
ERGONOMICS	★★★★★
FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

The Cowon iAudio 9 rightfully bagged the title of Best Performance by outperforming all players in both audio and video sections. It has an excellent build-quality with a scratch-resistant shell. It is sleek and light and has an averagely-sized 2-inch 240 x 320 TFT display screen. The responsive backlit touchpad makes operating it a breeze. It can playback DivX and WMV video formats out of the box, and for audio, it supports MP3, WMA, FLAC, Ogg and WAV. The iAudio 9 packs in 8 GB of storage. The battery can output 29 hours of audio or 7 hours of video on a single charge. Additional features include games, FM radio, voice recorder, and audio/video output. It also includes Cowon's JetEffect v3.0 and BBE+ sound engine, which enhances the audio further. The built-in speakers are not too good, but the bundled earphones are excellent. One downside is the proprietary PC interface for charging and data transfer. Also, composite AV cables are not bundled with the player.

VERDICT: A full-fledged media player for both portability and TV connectivity.

FOR: Ease of use, composite AV out, touch interface, good audio and display.

AGAINST: Proprietary PC interface, puny speaker, AV cabled not bundled.

PMP PLAYER (LARGE SCREEN)

COWON J3



SPECIFICATIONS

Rs 11,000

Dimensions (WxHxD): 56 x 106.5 x 9.9 mm; Weight: 76 g;
Capacity: 4 GB; Display: 480x272 AMOLED; File support: FLAC,
Ogg, DivX and WMV.

CONTACT Lipap Systems Pvt Ltd
PHONE 9819917440
EMAIL info@cowonindia.in

RATINGS

BUILD QUALITY	★★★★★
ERGONOMICS	★★★★★
FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

The Cowon J3 scores high on all counts. Videos and images look great on its 3.3-inch AMOLED display and the audio output is pristine. The volume level is excellent and so is the reproduction of frequencies. There are more than 30 equalizer presets and manual EQ to tweak the frequency bands. The player is a breeze to operate; the UI is fluid and intuitive, and the capacitive touchscreen adds to the comfort. Transferring media to it is as simple as copying music, videos and photos to the respective folders. The support for FLAC, Ogg Vorbis, DivX and WMV is native. It would have been nice if this player supported MKV and MOV, but nevertheless, it plays almost everything besides these formats. Besides audio and video playback and a picture viewer, the J3 features FM radio, calculator, notepad, and Flash player. At Rs 11,000 for the 4 GB variant, the J3 is quite expensive and even the AMOLED display, memory expansion support and HDMI output can't justify it. But if you're an audiophile and meticulous about quality, price no bar, then get this one.

VERDICT: A pocket dynamite that costs a bomb.

FOR: fantastic AMOLED display, excellent audio quality, intuitive UI.

AGAINST: No MKV and MOV support.

PMP PLAYER (LARGE SCREEN)

ZEBRONICS CINEMA 3.0



SPECIFICATIONS

Rs 2,999

Dimensions (WxHxD): 91 x 50.5 x 12.5 mm; Weight: 46 g;
Capacity: 4 GB; Display: 400x240; File support: MP3, WMA, DivX,
MP4 and MOV.

CONTACT Top Notch Infotronics India Pvt Ltd
PHONE 044-43936000
EMAIL enquiry@zebronicinfo

RATINGS

BUILD QUALITY	★★★★★
ERGONOMICS	★★★★★
FEATURES	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

X Zebronic has recently introduced a bunch of PMPs, and they seem to have done a very good job with some of them, including the Cinema 3.0. It's about the size of a visiting card and has a 3-inch display with a 240x400 resolution - good enough for watching videos. This player bagged the Best Value award mainly because of its price. It's one of the most affordable players in its segment, and it offers a good set of features. The Cinema 3.0 supports DivX, MP4, MOV, VOB and MPG formats natively, so you won't need to transcode videos. The quality of audio output is very good, but you'll need a good pair of earphones to do it justice because the supplied earphones are below average. The overall performance is good, but the ergonomics could have been way better. Using the tacky buttons at the bottom of the screen to navigate through media and options can be frustrating at times. Instead, Zebronic should have gone with a touchscreen screen. Want a pocket DivX player for a throwaway price? Pick this one.

VERDICT: For its price and features, you can't go wrong.

FOR: Great audio quality, good price,

AGAINST: Sluggish UI, average earphones.

PERSONAL TAKE

ANAND TULIANI
anand.tuliani@chip.in



I was waiting for this comparison test so that I could go and pick a good MP3 player after testing all of them thoroughly. At first, I thought I'll go in for a big brand like Apple or Cowon, but in the end, I found that even smaller brands have some great players. The Philips GoGear Spark is an excellent player if you want something tiny and sturdy while working out. A 4 GB player can hold around 1,000 MP3s, which you won't need to replace for at least a few months. It's a great performer, but to realize its full potential, you'll have to use a good set of earphones. When it comes to videos, the larger the screen, the better the visual treat. I like the Yes PMP 99 for its large 4.3-inch screen, 8 GB of internal storage, memory expansion, and ease of use it offers at an attractive price. The Zebronics Cinema 4.3 is also good, but I like the PMP 99 for its superior build.

FRANCIS D'SA
francis.dsa@chip.in



While players such as the Yes PMP 100HD and the Zebronics Cinema 4.3 offer larger screens at lower prices, the Apple iPod Touch and the Cowon J3 carry hefty price tags. That said, audio/video quality and price aren't everything; when it comes to media players, ergonomics is just as important. Players must have fluid GUIs that are easy to operate. The YES PMP-100HD has an easy-to-use interface with a large, crisp display, but it suffers from poor ergonomics. The lack of a touch screen or D-pad cost it dearly in this round-up. The iPod Touch might sound like a good option, but it does have a few downsides - iTunes is a must for media transfers and every video has to be encoded. The Cowon J3, on the other hand, is a beautiful mix of features—OLED display, responsive capacitive touch UI, great sound, and awesome build quality. However, when price comes into the equation, the iPod Touch offers better value for money.

SpecScan MP3 PLAYERS

1



2



NAME	ZEBRONICS	PHILIPS
Model	Zebrate 75 Unique	GoGear Spark
Contact	Top Notch Infotronics India Pvt Ltd	Philips Consumer Lifestyle
Phone	044-43936000	0124-4606000
E-mail	enquiry@zebronics.info	corpcomm.india@philips.com
Price*	Rs. 1,999	Rs. 3,499
OVERALL		
Features (40%)	74	55
Build Quality (10%)	72	85
Ergonomics (20%)	81	99
Performance (25%)	83	93
Warranty (5%)	100	100
Overall (out of 100)	78	77
Value For Money	★★★★☆	★★★★☆
FEATURES		
Dimensions (WxHxD) Weight	70.5 x 12.8 x 12.6 mm 26 g	110 x 120 x 30 mm 31 g
Capacity Memory expansion	4 GB None	4 GB None
Display: Size, type and resolution	1-inch, LCD, 128 x 64	1.44-inch, TFT, 128 x 128
Audio formats	MP3, WMA, WAV	MP3, WMA, FLAC, WAV
Picture formats	None	JPG, BMP
Equalizer presets	7	6
Playlist management FM radio	✗ ✓	✓ ✓
Audio recording	✓	✗
Rated battery life	75 hrs	22 hrs
PC interface type	mini USB	mini USB
Bundled earphones type	In-ear	Earphones
Bundled USB charger	✓	✗
Aesthetic appeal **	1.5	3.5
BUILD QUALITY		
Quality: Shell Earphones **	4.5 4	4.5 5
Sturdiness of buttons **	4	5
Use of metal in construction	✗	✗
Scratch and stain resistant	✓	✗
Port flaps	✗	✓
ERGONOMICS		
Buttons: Size Spacing Tactility **	3.5 3 3.5	5 5 5
Navigation aid	D-pad	D-pad
Ease of operation **	4	5
Hold button	✓	✓
Overall grip **	4.5	4.5
PERFORMANCE		
Overall UI smoothness **	4	5
Audio performance **		
Bollywood	4.5	5
Hip Hop	4	5
Jazz	4.5	5
Club / House	5	5
Rock	4	4.5
Audio quality of earphones **	3	3
WARRANTY		
Warranty period	1 year	1 year

* Prices are indicative and are subject to change, taxes extra. ** Scores out of 5

3

4

5

6

7


PHILIPS	APPLE	YES	APPLE	ZEBRONICS
Raga	iPod Nano	YMP-25	iPod Shuffle	Zebmate 20
Philips Consumer Lifestyle	Apple India	India Digital Life	Apple India	Top Notch Infotronics India Pvt Ltd
0124-4606000	080-40455150	9004090467	080-40455150	044-43936000
corpcomm.india@philips.com	indiasales@mac.com	mani.ramchandran@indiadigitallife.com	indiasales@mac.com	enquiry@zebronics.info
Rs. 2,599	Rs. 12,700	Rs. 2,299	Rs. 3,200	Rs. 1,350
75	74	62	62	57
★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
43.3 x 46 x 13.6 mm 30 g	41 x 37.5 x 8.78 mm 21.1 g	25 x 85 x 12 mm 25 g	17.5 x 45.2 x 7.8 mm 12.5 g	26 x 70 x 12 mm 21 g
2 GB None	16 GB None	2 GB None	2 GB None	2 GB None
1-inch, LCD, 128 x 64	1.5-inch, Capacitive TFT, 240 x 240	1-inch, Mono LCD, 128 x 32	NA	1-inch, LCD, 128 x 64
MP3, WMA, FLAC, WAV	MP3, WAV, AAC	MP3, WMA, WAV	MP3, WAV, AAC	MP3, WMA, WAV
None	JPG, BMP, GIF, TIFF	None	None	None
6	22	6	None	6
✓ ✓	✗ ✓	✗ ✓	✗ ✗	✗ ✓
✗	✓	✓	✗	✗
22 hrs	24 hrs	NA	15 hrs	20 hrs
mini USB	Proprietary	USB	Proprietary	mini USB
Earphones	Earphones	Earphones	Earphones	Earphones
✓	✗	✗	✗	✓
3	5	3.5	3.5	2
5 5	5 5	5 4.5	5 5	4 4
5	5	4	5	4
✓	✓	✗	✓	✗
✓	✗	✓	✓	✗
✗	✗	✓	✗	✗
4 5 4	4 5 5	4.5 5 4	5 5 5	2.5 2.5 3
D-pad	Touchscreen	None	D-pad	D-pad
5	5	0	5	3
✓	✗	✓	✓	✗
3.5	5	5	5	4
5	5	5	5	2
4.5	4	4	4	4.5
4.5	4.5	4.5	4.5	5
4.5	4	4.5	4	5
5	3.5	4	3.5	4.5
4.5	3	3.5	3	4
3	4	3.5	4	4
1 year	1 year	1 year	1 year	1 year



SpecScan PMP (SMALL SCREEN)

1



2



3



NAME	COWON	TRANSCEND	CREATIVE
Model	Cowon iAudio 9	MP-870	Zen X-Fi Style
Contact	Lipap Systems Pvt Ltd	Mediaman Infotech Pvt Ltd	Creative Technology
Phone	9819917440	022-43441122	9223101322
Phone	info@cowonindia.in	santosh@mediamangroup.com	vinayendra.singh@compugaindia.com
Price*	Rs. 8,000	Rs. 5,000	Rs. 6,999
OVERALL			
Features (40%)	48	41	44
Build quality (10%)	92	72	58
Ergonomics (20%)	68	67	66
Performance (25%)	93	76	80
Warranty (5%)	50	100	50
Overall (Out of 100)	68	61	59
Value For Money	★★★★	★★★★	★★★★
FEATURES			
Dimensions (WxHxD) Weight	43 x 95 x 8.9 mm 40 g	94 x 50 x 12mm 62 g	83.6 x 48.7 x 11.7 mm 56 g
Capacity Memory expansion	8 GB None	4 GB micro SD	8 GB None
Display	2-inch, TFT, 320 x 240	2.4-inch, TFT, 240 x 320	2.4-inch, TFT, 320 x 240
Audio formats	MP3, WMA, FLAC, OGG, WAV	MP3, WMA, FLAC, OGG, WAV	MP3, WMA, FLAC, WAV, AAC
Picture formats	JPG	JPG, BMP, GIF	JPG, BMP, GIF
Video formats	DivX,WMV	MP4	DivX,WMV,MP
Audio equalization: Built-in presets Manual EQ	39 ✓	11 ✓	8 ✓
Playlist management FM radio Built-in speakers	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
eBook reader Games A/V out Audio recording	✓ ✓ ✓ ✓	✓ ✗ ✗ ✓	✗ ✗ ✓ ✓
WLAN Bluetooth Accelerometer	✗ ✗ ✗	✗ ✗ ✗	✗ ✗ ✗
Rated battery life: Audio Video	29 hrs 7 hrs	22 hrs NA	25 hrs 5 hrs
PC interface type	Proprietary	mini USB	mini USB
Bundled: Earphones type Charger	Earphones ✓	Earphones ✓	Earphones ✓
Aesthetic appeal **	4	4	3
BUILD QUALITY			
Quality: Shell Earphones **	5 5	5 5	5 4
Sturdiness of buttons **	5	5	5
Use of metal in construction	✗	✗	✗
Scratch and stain resistant	✓	✗	✗
Port flaps	✓	✓	✗
ERGONOMICS			
Buttons: Size Spacing Tactility **	4 4.5 5	5 4 5	3 3 3.5
Navigation aid	Touchpad	D-pad	D-pad
Ease of operation **	4	4	5
Hold button	✓	✓	✓
Overall grip **	5	4	5
PERFORMANCE			
Overall UI smoothness**	5	4	5
Audio performance **			
Built-in speakers	3	4	3.5
Bollywood Hip Hop	5 4.5	4 4.5	4.5 4.5
Jazz Club / house	5 5	4.5 4	4.5 5
Rock	4.5	4	4.5
Audio quality of earphones **	4	2.5	2
Display: Viewing angle **	5	3.5	3.5
Display: Performance - videos and photos **	4.5	3.5	3.5
WARRANTY			
Warranty period	1 year	2 years	1 year

* Prices are indicative and are subject to change, taxes extra. **Scores out of 5

4



5



6



7



8



APPLE	SONY	CREATIVE	CREATIVE	YES
iPod Classic	Walkman NWZ-E454	Zen MX	Zen Mosaic EZ 300	Sapphire
Apple India	Sony India	Creative Technology	Creative Technology	India Digital Life Style
080-40455150	1800-103-7799	9223101322	9223101322	9004090467
indiasales@mac.com	sonyindia.care@ap.sony.com	vinayendra.singh@compuageindia.com	vinayendra.singh@compuageindia.com	mani.ramchandran@indiadigitallife.com
Rs. 15,200	Rs. 6,990	Rs. 3,999	Rs. 3,999	Rs. 2,299
57	55	55	52	50
☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆	☆☆☆☆☆
61.8 x 103.5 x 10.5 mm 140 g	44 x 95 x 10.4 mm 58 g	55 x 83 x 11.3 mm 65 g	79.5 x 40 x 12.8 mm 43 g	47 x 87 x 7 mm 32 g
160 GB None	8 GB None	8 GB SD	4 GB None	2 GB microSD
2.5-inch, TFT, 320 x 240	2-inch, TFT, 240 x 320	2.5-inch, TFT, 320 x 240	1.8-inch, TFT, 128 x 160	1.8-inch, TFT, 208 x 176
MP3, WAV, AAC	MP3, WMA, AAC	MP3, WMA, WAV, AAC	MP3, WMA	MP3, WMA, WAV
JPG, BMP, GIF	JPG	JPG	JPG	JPG, BMP, GIF
MP4, MOV	WMV, MP4	WMV	Proprietary	M-JPEG
22 ✕	4 ✓	8 ✓	8 ✓	5 ✓
✕ ✕ ✕	✕ ✓ ✕	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓
✕ ✓ ✕ ✕	✕ ✕ ✕ ✓	✕ ✕ ✕ ✓	✕ ✕ ✓ ✓	✓ ✓ ✕
✕ ✕ ✕	✕ ✕ ✕	✕ ✕ ✕	✕ ✕ ✕	✕ ✕ ✕
36 hrs 6 hrs	50 hrs 10 hrs	30 hrs 5 hrs	32 hrs NA	4 hrs 2 hrs
Proprietary	Proprietary	mini USB	mini USB	mini USB
Earphones ✓	Earphones ✓	Earphones ✓	Earphones ✓	Earphones ✓
4	4	4	3	3.5
5 5	5 5	5 4	5 4	4 4
5	5	5	4.5	4
✓	✕	✕	✕	✕
✕	✕	✕	✓	✓
✕	✕	✕	✕	✕
5 5 5	5 5 5	3.5 3.5 4.5	3.5 3 3.5	4 3.5 3
Touchpad	D-pad	D-pad	D-pad	D-pad
5	5	5	5	2
✓	✓	✕	✕	✕
4.5	5	4.5	4.5	5
5	5	5	4.5	3
0	0	0	3.5	2
4.5 4.5	4 4	4.5 4.5	4 4	3 3.5
5 4	4.5 4.5	4.5 5	4.5 5	4 4
4.5	4	4	3.5	3.5
3.5	4	2	2	3.5
4	3.5	3.5	3	3.5
4	3.5	3.5	2.5	3
1 year	1 year	1 year	1 year	1 year



SpecScan PMP (LARGE SCREEN)

9



10



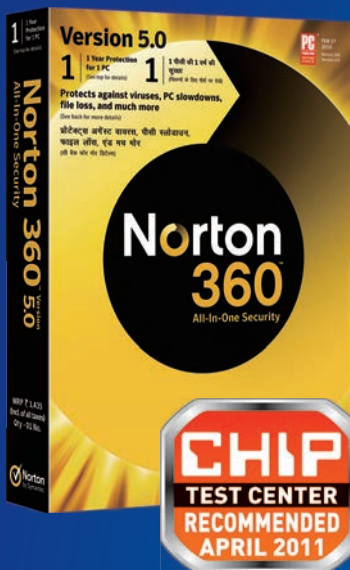
11



NAME	COWON	COWON	APPLE
Model	Cowon J3	V5 HD	iPod Touch
Contact	Lipap Systems Pvt Ltd	Lipap Systems Pvt Ltd	Apple India
Phone	9819917440	9819917440	080-40455150
Phone	info@cowonindia.in	info@cowonindia.in	indiasales@mac.com
Price*	Rs. 11,000	Rs. 17,500	Rs. 19,900
OVERALL			
Features (40%)			
Build quality (10%)			
Ergonomics (20%)			
Performance (25%)			
Warranty (5%)			
Overall (Out of 100)	74	72	65
Value For Money	★★★★★	★★★★★	★★★★★
FEATURES			
Dimensions (WxHxD) Weight	56 x 106.5 x 9.9 mm 76 g	128 x 82 x 15.7 mm 197 g	59 x 111 x 7.2 mm 101 g
Capacity Memory expansion	4 GB microSD	16 GB SD	32 GB None
Display	3.3-inch, Capacitive AMOLED, 480 x 272	4.8-inch, Resistive TFT, 800 x 480	3.5-inch, Capacitive TFT, 960 x 640
Audio formats	MP3, WMA, FLAC, OGG, WAV	MP3, WMA, FLAC, OGG, WAV	MP3, WAV, AAC
Picture formats	JPG	JPG, BMP, TIFF, RAW	JPG, BMP, GIF
Video formats	DivX, WMV	MKV, DivX, WMV, MP4, 3GP	MP4, MOV
Audio equalization: Built-in presets Manual EQ	39 ✓	39 ✓	22 ✗
Playlist management FM radio Built-in speakers	✓ ✓ ✓	✓ ✗ ✓	✗ ✗ ✓
eBook reader Games A/V out Audio recording	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓
WLAN Bluetooth Accelerometer	✗ ✓ ✗	✗ ✗ ✗	✓ ✓ ✓
Rated battery life: Audio Video	64 hrs 11 hrs	45 hrs 10 hrs	40 hrs 7 hrs
PC interface type	Proprietary	Proprietary	Proprietary
Bundled: Earphones type Charger	Earphones ✓	Earphones ✓	Earphones ✓
Aesthetic appeal **	4.5	4	5
BUILD QUALITY			
Quality: Shell Earphones **	5 5	5 5	5 5
Sturdiness of buttons **	5	5	5
Use of metal in construction	✗	✗	✓
Scratch and stain resistant	✓	✓	✗
Port flaps	✓	✓	✗
ERGONOMICS			
Buttons: Size Spacing Tactility **	5 5 5	5 5 5	5 5 5
Navigation aid	Touchscreen	Touchscreen	Touchscreen
Ease of operation **	5	4	5
Hold button	✓	✓	✓
Overall grip **	5	4.5	5
PERFORMANCE			
Overall UI smoothness**	5	3.5	5
Audio performance **			
Built-in speakers	3	4	2.5
Bollywood Hip Hop	5 5	4.5 5	4 4
Jazz Club / house	5 5	5 5	3.5 3.5
Rock	5	5	3
Audio quality of earphones **	4	2.5	3.5
Display: Viewing angle **	5	4	4.5
Display: Performance - videos and photos **	5	4.5	5
WARRANTY			
Warranty period	1 year	1 year	1 year

* Prices are indicative and are subject to change, taxes extra. **Scores out of 5

12	13	14	15	16
ZEBRONICS	CREATIVE	YES	YES	ZEBRONICS
Cinema 4.3	Zen X-Fi 2	PMP-99	PMP-100HD	Cinema 3.0
Top Notch Infotronics Pvt Ltd	Creative Technology	India Digital Life Style	India Digital Life Style	Top Notch Infotronics India Pvt Ltd
044-43936000	9223101322	9004090467	9004090467	044-43936000
enquiry@zebronic.info	vinayendra.singh@compugaindia.com	mani.ramchandran@indiadigitallife.com	mani.ramchandran@indiadigitallife.com	enquiry@zebronic.info
Rs. 4,200	Rs. 8,999	Rs. 5,500	Rs. 7,500	Rs. 2,999
65	60	59	54	52
★★★★★	★★★★☆	★★★★☆	★★★★☆	★★★★★
121 x 75 x 13.7 mm 128 g	102 x 57 x 11.6 mm 75 g	78.2 x 118 x 14 mm 145 g	129 x 85 x 12 mm 250 g	91 x 50.5 x 12.5 mm 46 g
8 GB microSD	8 GB microSD	8 GB micro SD	8 GB micro SD	4 GB None
4.3-inch, Resistive TFT, 480 x 272	3-inch, Resistive TFT, 400 x 240	4.3-inch, Resistive TFT, 480 x 272	5-inch, TFT, 800 x 480	3-inch, TFT, 400 x 240
MP3, WMA, OGG	MP3, WMA, FLAC, WAV, AAC	MP3, WMA, FLAC, AAC	MP3, WMA, FLAC, WAV, AAC	MP3, WMA
JPG, BMP, GIF	JPG, BMP	JPG, BMP, GIF	JPG, BMP, GIF	JPG, BMP
MKV, DivX, WMV, MP4, MOV, 3GP	DivX, WMV, MP4	DivX	DivX	DivX, MP4, MOV, MPG
7 ✗	8 ✓	7 ✗	7 ✗	6 ✓
✗ ✓ ✓	✓ ✓ ✓	✗ ✓ ✓	✗ ✓ ✓	✗ ✓ ✗
NA ✗ ✓ ✓	✗ ✗ ✓ ✓	✓ ✗ ✗ ✓	✓ ✗ ✓ ✓	✓ ✗ ✗ ✓
✗ ✗ ✗	✗ ✗ ✗	✗ ✗ ✗	✗ ✗ ✗	✗ ✗ ✗
13 hrs 4.5 hrs	25 hrs 5 hrs	16 hrs 5 hrs	10 hrs 3.5 hrs	15 hrs 4 hrs
mini USB	mini USB	mini USB	mini USB	mini USB
Earphones ✓	In-ear ✓	Earphones ✓	Earphones ✓	In-ear ✓
4	4	4	4.5	3.5
3.5 3	4.5 5	4 4	5 NA	4 3.5
4.5	5	5	5	4.5
✗	✗	✗	✓	✗
✓	✗	✗	✓	✗
✓	✗	✓	✗	✗
5 5 5	5 4 5	5 5 5	3.5 5 5	3.5 5 3.5
Touchscreen	Touchscreen	Touchscreen	None	None
5	5	5	2.5	3.5
✗	✓	✓	✗	✗
4.5	5	4	3	4.5
4.5	4	4	5	3.5
3.5	3	3.5	1.5	No speaker
4 4	2.5 3	4 4	4.5 4	3.5 4.5
4.5 4.5	2.5 3.5	4.5 4.5	4.5 4.5	4 4.5
4.5	2	4.5	4.5	4
4	5	3.5	NA	3.5
3	3.5	3	3	3.5
4	3.5	4	3.5	3.5
1 year	1 year	1 year	1 year	1 year



SECURITY SUITE

NORTON 360 V5.0

VERDICT: An excellent all-round security suite**FOR:** Resource friendly, excellent scanning speed, intuitive user interface.**AGAINST:** No browser plug-ins for Opera and Chrome, tuning utilities are very basic.

The most recent launch by Symantec is Norton 360 version 5.0, which in addition to the functions of their Internet Security suite, includes utilities for tuning system performance and online backup with 2 GB of storage space included in the package.

What's New?

If you've used Norton 360 v4.0, the first thing you'll notice is the main user interface with a fresh look and feel. Symantec has kept the main functions the same, but there are a few new elements and some of them have been relocated. The suite offers four primary modules; PC Security, Identity Protection, Backup and PC Tuneup. On hovering the mouse over the big icons, a list of related functions gets displayed. The bottom section of the main UI in v4.0 was relatively empty with a black ribbon at the bottom showing the subscription status and shortcuts for LiveUpdate, scan and support. Right above, to the right were icons for Norton Tasks, My Network and System Insight and Performance. The new UI does away with the three tiny icons and presents one-click access to Activity Map, Online Family (parental control) and Safe Web, which are more useful.

The Activity Map uses the empty space at the bottom to display a world map, which shows cybercrime activity details for the past 24 hours. It fetches information from the Web and displays statistics in a ticker. You can click on the name of the threat in the ticker to view information on it. The Safe Web function displays the number of malicious URLs and websites detected by the Norton community. A ticker showing the list of malicious websites scrolls at the bottom and you can click on the names of websites to view the report on them. In addition, you can type the names of websites to see if they are safe to browse. The System Insight and Performance has been moved to the menu at the top of the UI. These are the most significant changes in v5.0; the rest are

minor tweaks. For example, the scan section now has a tool to scan Facebook walls.

The Suite

The main UI has minimal elements, but when you hover over the main modules, you'll see that the suite has a lot to offer, and everything is presented neatly. The PC Security module has the option to view protection status, run scan, LiveUpdate and Norton Insight. In addition to scanning a file, you can run just a reputation scan, which tells the software which running processes and programs can be trusted. The reputation of trusted files is based on the intelligence data provided by the worldwide community of Norton users. The suite uses the downloaded definitions as well as reputation data to scan data on the PC. The Identity Protection module protects the user from malicious content and fraudulent websites using Safe Web. Norton 360 v5.0 integrates with Internet Explorer and Firefox and adds a toolbar with Safe Web and Identity Safe. The latter securely stores logon details and credit card numbers, and can automatically fill forms.

With the Backup module, you can backup data to Norton's secure online storage or external storage devices and locations on your hard drive. Backing up data is a simple three-fold process. You have to specify what you wish to backup (document types or partitions), the backup location, and the schedule. The backup run can be automatic, weekly, monthly or manual. The PC Tuneup module has a Disk Optimization tool (defragmenter), File Cleanup tool and Startup Manager. The File Cleanup tool helps gain disk space by clearing temporary files created by Internet Explorer and Windows. The Startup Manager is like the Startup tab in Windows System Configuration utility. You can choose to enable/disable startup items and delay startup of resource-intensive items. The only difference is that Startup Manager is user-friendly and doesn't feel too intimidating.

SPECIFICATIONS

Rs 3,085
(3 PC license)

Rs 1,435
(single PC License)
www.symantec.com

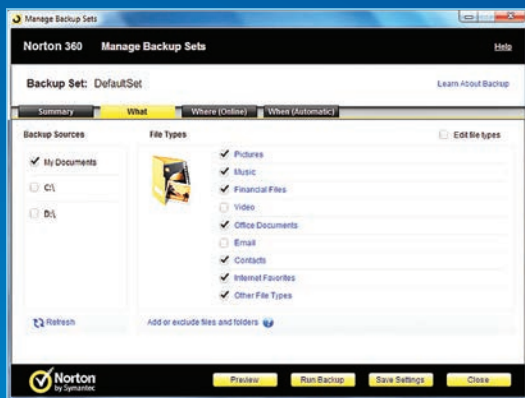
SYSTEM REQUIREMENTS

OS: Windows XP/Vista/7; RAM: 256 MB;
Drive space: 300 MB.

CONTACT Symantec India
PHONE 1800-102-4235
EMAIL nortonindia@symantec.com

RATINGS

FEATURES	★★★★☆
PERFORMANCE	★★★★★
EASE OF USE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★



Backing up data is a 3-step process. Files can be backup online (2 GB included) or to the hard disk and external storage.

Performance

It took just 48 seconds to install Norton 360 v5.0 on our test PC, which as an Intel Core i3-based laptop with 4 GB of RAM and a 500 GB hard disk. As soon as the installation was complete, we ran LiveUpdate, which downloaded 105 MB of update data. The suite is very light on resources and takes up just 11 MB of memory in idle mode. However, the utilization goes a little higher than 150 MB when performing a full system scan, which is not too bad. It took 13 minutes to perform a full scan on the boot drive with 21 GB of data for the first time. The subsequent scans were quicker, requiring less than three minutes for completion. The overall responsiveness of the operating system (Windows 7 64-bit) as very good after installation and the boot time wasn't severely hit.

Verdict

Norton 360 v5.0 is rated as the top overall performer by Dennis Technology Labs. It's also rated as the top in performance tests by PassMark Software. So currently, it's undoubtedly the best all-round security suite you can go in for. Now, if you were to ask us whether you should go for Norton 360 v5.0 or Norton Internet Security 2011, it depends on what you want. Is online backup important to you? Do you need PC tuning utilities in a security suite? If yes, then go for Norton 360. Unlike external storage devices, which can malfunction or get lost, online storage is more secure. Your indispensable documents and photos will be safe. But uploading large files will take a lot of time on a slow Internet connection; utilizing the entire 2 GB of online storage would take eons. As far as the PC tuning utilities go, the functions provided in here are too basic. Freeware utilities like CCleaner offer a lot more and perform better. If you think you can do without online backups, get Norton Internet Security 2011, which costs Rs 1,220 (single PC license), and use CCleaner for PC tuning. 

- Anand Tuliari

ON DVD



APRIL 2011

RED HOT APPLICATIONS

Microsoft Office Home and Business 2010

FULL SOFTWARE

PortableApps Suite 1.6.1
WinInizio PenSuite Utilities 2.1
winPenPack Flash Web v3.6

Lupo PenSuite Lite 2010.10
CodySafe Admin Pack 1.1.0.135

FULL GAMES

Armagetron Advanced Portable
AssaultCube Portable
Atomic Tanks Portable
Brutal Chess Portable
Freeciv Portable
Frets on Fire
Hedgewars Portable
IceBreaker Portable
Jooleem Portable
LBreakout2 Portable
LMarbles Portable *and more...*

GAME ADD ONS

Dreamlords Online Client
Patch 1.99.7 Beta
Priston Tale 1 Patch 3141
Dragonica Patch 1.7.18
GodsWar Online
Patch 2.34.000-2.34.001
EVE Online Patch (Classics and
Premium Graphics Content)
6.10.224393 *and more...*

GAME DEMOS

Dungeons
Cities in Motion
Sonic the Hedgehog 3D

GAME TRAILERS

Fight Night Champion
- Demo Sizzle
Mortal Kombat Liu Kang
Hunted: The Demon's Forge
- Accolades
Homefront - Resistance
Total War: Shogun 2 - CGI Intro
Anarchy Reigns - Teaser
Ridge Racer Unbounded - Debut
Battlefield 3 Teaser
Resistance 3 - PlayStation
Experience 2011 *and more...*

LINUX

LINUX DISTRIBUTION
Debian Live 6.0.0

LINUX TOOLS

Portable OpenSSH 5.8p1
Allegro 4.9.21
Portable Linux Processor
Affinity 1.3.2
RUNZ Framework 0.8.9.7
Stardust 0.1.12

Furius ISO Mount Portable
0.11.1.1
PlayStation Portable Video
Converter 0.3 *and more...*

TOOLS

MULTIMEDIA

Ashampoo Movie Menu
1.0.1.49 (0071)
Lightworks 2010 Public Beta
- 10.0.3
VidCoder 0.8.1 Beta
streamWriter 1.3.0.0
KompoZer Portable 0.77
AniFX Portable 1.0
IcoFX Portable Edition 1.6.4
Inkscape Portable
Portable IrfanView 4.28
Audacity Portable
CoolPlayer+ Portable
DVDStyler Portable *and more...*

INTERNET

Portable Database Browser
3.2.2.17
Freemake Video Downloader
2.0.3.3
Enable Viacam (eviacam)
KidZui 5.0.188 Build 6216
KidZui Extension 0.8
Portable XAMPP 1.7.4
Portable Celestia 1.6.0
Portable Stellarium 0.10.6.1
aMSN Portable
2X Client Portable
TeamViewer Portable *and more...*

MOBILE

Twitter (Android) 2.0.0
Orbot: Tor on Android 1.0.4
Nokia Situations 2.06 beta
Fring (Android) 2.4
Watchee (Java) 1.4.4
QIP Mobile Messenger (Symbian)
Build 3100
OfficeSuite Professional
(Android) 3.0.314
Mig33 (Java) 4.50 *and more...*

SECURITY

Norton 360 5.0.0.125
Child Control 2011
eScan Internet Security Suite 11
Kaspersky Internet Security 2011
Avira Premium Security Suite
10.0.0.592

PC Tools Internet Security 2011
8.0.0.624
G DATA InternetSecurity 2011
21.0.2.1
Panda Internet Security 2011
16.00.00
F-Secure Internet Security 2011
Norton Internet Security 2011
18.1.0.37 *and more...*

SYSTEM

XYplorer 9.90.0500
Paragon System Backup 2010
Speccy 1.08.218
AsfBinWin version
aethyr
CustoPack Tools 1.0.0.40
Backup Maker Standard Edition
6.103
On Top Replica 2.5
AceMoney Lite 4.15.1
Evalazer 0.9.0.0
Registry Clean Expert 4.83
On-Screen Keyboard Portable
FCleaner Portable 1.3.1.621
AbiWord Portable
Dia Portable
Finance Explorer Portable
FocusWriter Portable *and more...*

MUST HAVES

DirectX 9.0c (Jun 10)
NVIDIA Forceware 266.58 WHQL
XP/Vista
ATI Catalyst Drivers 11.2 XP/Vista
Java Runtime Environment
1.6.0.24 (32-bit)
.NET Framework Version 4.0
Silverlight 4.0.60129
Realtek High Definition Audio
2.57 XP/Vista

ADOBE PLAYERS

Flash Player 10.2.152.26
(IE & Non-IE)
Adobe Air 2.5.1.17730
Shockwave Player 11.5.9.620

E-BOOKS

CHIP ARCHIVES

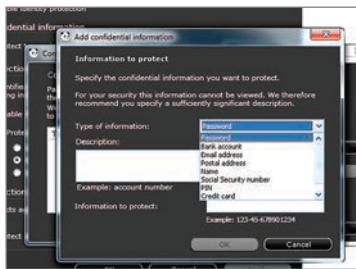
November 2010 to January 2011

BUSY

Accounting, Inventory & Billing
Software

VERDICT

AN ANTIVIRUS SUITE THAT ALSO OFFERS ANTI-SPAM AND ANTI-ID THEFT FEATURES



This is one of the first security suites to include a backup feature.

SPECIFICATIONS

Rs 1,299 (Single PC)
www.pandasecurity.com

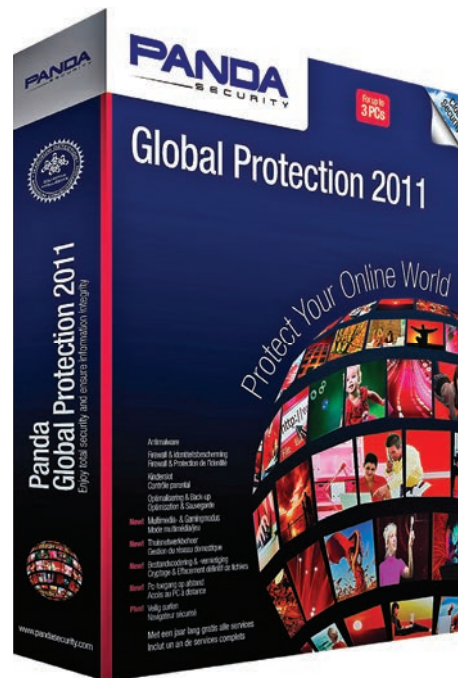
SYSTEM REQUIREMENTS

OS: Windows XP, Windows Vista, Windows 7;
Processor: 300 MHz equivalent; RAM: 1 GB or higher;
Disk space: 275 MB.

CONTACT Cyberstar India
EMAIL info@cyberstarindia.com

RATINGS

FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
EASE OF USE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆



SECURITY SUITE

PANDA GLOBAL PROTECTION 2011

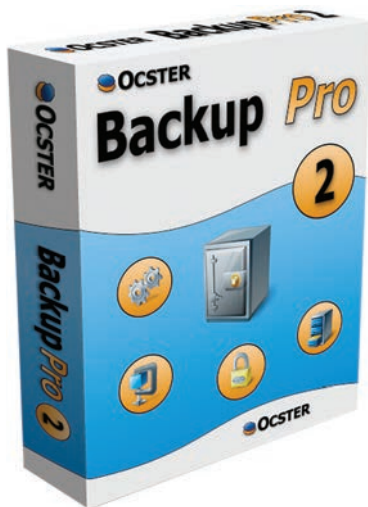
FOR: Identity theft protection, system maintenance module, very easy to configure.
AGAINST: Slight system slowdown once installed.

Since the Internet is used on nearly every PC, there is always a threat of being infected by malware. A licensed antivirus offers the best protection. With the latest release of Global Protection 2011, Panda seems to be making its mark on the industry. The Global Protection 2011 security suite features an antivirus, firewall, anti-spam protection, parental controls, identity protection, system optimization, backup, multimedia and gaming modes, network manager, file encryption and shredding, remote PC access and safe browsing. The installation of the security suite is pretty simple and so is the user interface.

The identity protection module is quite awesome; enabling the feature pops up a message asking you permissions for sending critical information such as username, passwords, bank account numbers, email addresses, PIN and credit card numbers over the Internet.

This module is very useful for those using messenger applications. Phishing websites are also blocked depending on the sensitivity settings in the application. The built-in anti-spam feature also works well. It is almost automated and can also be trained by the user for more accuracy. Parental control is not installed by default, but getting it there is a matter of a few seconds. Though the parental control is useful, configuring it can be a little tedious. Another brilliant add-on is the maintenance module, which allows you to wipe out crucial cached information such as IE history, cookies, temporary files, etc. Also included in the suite is a disk defragmenter and automatic backup feature. We did find the test PC slow down a minuscule amount due to the number modules occupying the system memory, but considering the protection it offers, it is worth the wait.

- Francis D'sa



BACKUP UTILITY

OCSTER BACKUP PRO 6

VERDICT: A decent utility for daily backups with the support for online storage.

FOR: Online storage, simple interface.

AGAINST: Online storage can be slow and expensive.

The Ocster Backup Pro utility offers an advanced backup functionality. It can back up specific files and folders to the internal hard drive, local network or an external USB storage. The Pro version can be used for backups to local drives or on the local network, but you can also store your data on the Ocster online backup servers by purchasing online space. Other than regular files and folders, the backups can also include data from Internet Explorer,

SPECIFICATIONS

\$39.90
(approx Rs 2,000)
www.ocster.com

SYSTEM REQUIREMENTS

OS: Windows all; Processor: 1 GHz or equivalent;
RAM: 512 MB; Disk space: 125 MB.

CONTACT	Ocster
PHONE	NA
EMAIL	NA

RATINGS

FEATURES	★★★★★
EASE OF USE	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★☆

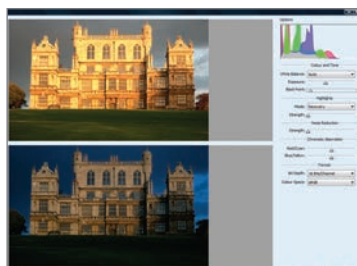
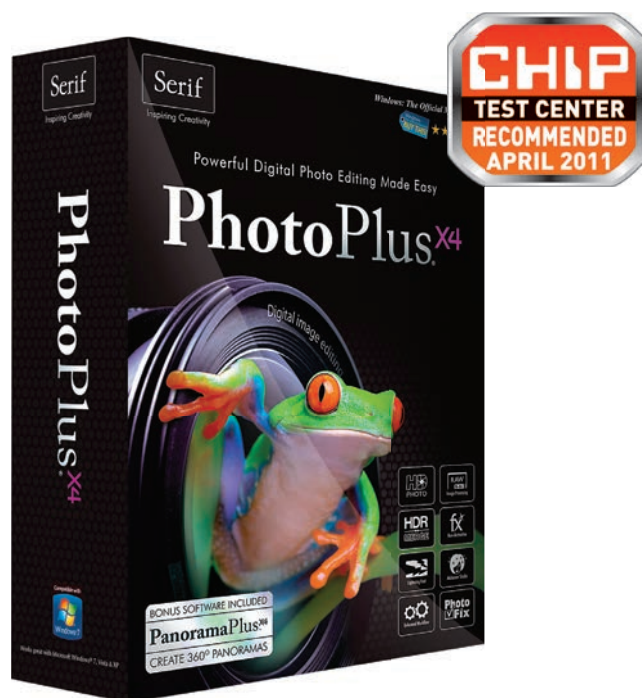
Firefox, Thunderbird, Outlook, etc. The backups can be configured in either standard mode or 1:1 file copy mode. The standard mode allows file versioning, permissions, compression with encryption, hard and sym links, and incremental backups. The 1:1 file copy mode only features versioning but does not

compress or encrypt. A backup client loads with Windows and runs scheduled backups automatically. You can have numerous backups configured and can enable automatic deleting of old backups. The utility adopts the LZMA compression technique and file format for compression and encryption. At Rs 2,000, it is worth investing in as it is faster and more automated than conventional backup utilities. 🇮🇳

- feedback@chip.in

VERDICT

**A POWERFUL
SEMI-
PROFESSIONAL
IMAGE EDITING
UTILITY.**



Editing and creating HDR images is quite simple and effective.

IMAGE EDITOR

SERIF PHOTOPLUS X4

FOR: Ease of use, some tools similar to Photoshop, good price.

AGAINST: Not as convincing as Photoshop.

Professionals who deal with image editing often prefer Photoshop because it is still the undisputed number one professional solution for image editing. However, there are many users who do not need the professional filtering algorithms, color space options, and fleet processing of RAW data. Serif PhotoPlus X4 is an inexpensive alternative for those who don't need the depth of Photoshop. Serif has obviously taken inspirations from the top dog, which can be seen in some menus and work areas, which are very similar to Photoshop.

PhotoPlus X4 offers features ranging from simple color processing to all the complex tasks that an amateur user could ever want. It features a very good magnetic lasso tool with great edge detection. Distortions can be calculated and removed quickly, and it also features various filters, which are implemented in a flash window. The extensive brush selection offers plenty of scope for creative work. Each step is reversible, so you can get creative without worrying

about ruining your work. To scale images, PhotoPlus X4 has a few different readymade algorithms that deliver excellent results. For bracketing, the program creates stunning HDR images with a very high dynamic range. Standard tasks such as red-eye corrections are executed pretty well. All these features are presented in a comprehensible user interface with clear explanations. Even the creation of image maps is easily possible. PhotoPlus X4 can export HTML code, which is automatically generated when required. The many features and capabilities of the different tools are explained in a compact handbook.

The program has a quick start bar, which helps the beginner ease into it, and additional tutorials are made available online. As a bonus, the package also offers Panorama Plus 4, which you can use to create 360-degree panoramas with minimum effort. The software was quite convincing, even though it did not manage to work at all times. 

-feedback@chip.in

SPECIFICATIONS

\$96 (approx Rs 4,800)

www.serif.com

SYSTEM REQUIREMENTS

OS: Windows all; Processor: 1 GHz or higher;
RAM: 512 MB; Disk space: 500 MB.

CONTACT Serif (Europe) Ltd
PHONE +44 115 914-2000
EMAIL oemsales@serif.co.uk

RATINGS

FEATURES	★★★★★
PERFORMANCE	★★★★★
EASE OF USE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

VERDICT

**A WELL-EQUIPPED
PRIVACY SUITE
THAT DOES A
VERY GOOD JOB.**



The user interface of the new version has been stepped up. It's more intuitive than before.

PRIVACY SUITE

STEGANOS PRIVACY SUITE 12

FOR: A good all-round suite, innovative features.

AGAINST: None.

If your PC is used by multiple users, you should make sure your sensitive data is secure. Steganos Privacy Suite 12 combines a password manager, tools for creating encrypted drives and emails, and a data shredding tool. Confidential files can be stored in password-protected folders (Data safes), which can be created using a simple wizard. These folders can contain up to 1 TB of data, which gets encrypted in real time (default: 256-bit AES) when moved. The safe can be accessed using the password or a key file stored on USB flash drive. A striking feature is the ability to access the safe using Bluetooth via an ActiveSync-enabled mobile phone. When the phone is out of range, the Data safe closes automatically. Confidential data can also be hidden within images and music (steganography).

The new version includes a feature called Traceless Drive. It's a RAM drive,

which the user can create to hold data temporarily in the memory. If you shut down or restart Windows, the data on the Traceless Drive is deleted. This feature is useful for erasing Internet history or files created by portable applications without leaving traces. Existing data on the hard drive can be shredded using Steganos Shredder. The shredded data cannot be recovered using data recovery software.

It also integrates itself into Firefox as a menu bar plug-in, and all the existing passwords are encrypted and stored in the Password Manager, which is capable of handling multiple user accounts. When the user accesses a website/webmail account, the autofill tool automatically adds the authentication details into the login fields. Steganos Privacy Suite is a good compilation of limited but useful tools to ward off prying eyes. It's easy to use and does its job very well. 

- feedback@chip.in

SPECIFICATIONS

\$69.95 (approx Rs 3,200)

www.steganos.com

SYSTEM REQUIREMENTS

OS: Windows XP/Vista/7; RAM: 256 MB;
Drive space: 100 MB.

CONTACT	Steganos
PHONE	NA
EMAIL	ocmsales@steganos.com

RATINGS

FEATURES	☆☆☆☆☆
PERFORMANCE	☆☆☆☆☆
EASE OF USE	☆☆☆☆☆
OVERALL RATING	☆☆☆☆☆
VALUE FOR MONEY	☆☆☆☆☆



SYSTEM UTILITY

REGISTRY CLEAN EXPERT

VERDICT: A powerful must-have utility for Web users and application testers.
FOR: Simple and straight-forward usage.
AGAINST: Slightly expensive.

SPECIFICATIONS

\$30 (approx Rs 1,500)
www.registry-clean.net

SYSTEM REQUIREMENTS

OS: Windows all; Processor: 1 GHz equivalent; RAM: 512 MB or higher; Disk space: 5 MB.

CONTACT iExpert Software
PHONE NA
EMAIL sales@registry-clean.net

RATINGS

FEATURES	★★★★★
EASE OF USE	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

An inflated system registry impacts the overall performance of the PC and increases the chances of errors and crashes. The system registry needs a tune-up at least once every month and Registry Clean Expert does just that. It is powerful enough and helps backup, repair and defragment the registry to keep your system in top shape. The tool is extremely easy to use and requires little user intervention. You can backup and restore the registry, apart from scanning and cleaning, erasing tracks, organizing startup entries, and removal of Internet Explorer's BHO entries. It also lets you pull up some Windows tools, such as disk cleaner, disk and device manager, system information, computer management, backup and restore, etc.

— Francis D'sa



DVD / BLU-RAY MENU TOOL

ASHAMPOO MOVIE MENU

VERDICT: Good for users who want a simple menu creation tool.
FOR: Lots of templates and buttons, good looking menus.
AGAINST: You can't create and use custom buttons.

SPECIFICATIONS

\$24.99 (approx Rs 1,450)
www.ashampoo.com

SYSTEM REQUIREMENTS

OS: Windows XP/Vista/7; RAM: 512 MB; Drive space: 205 MB.

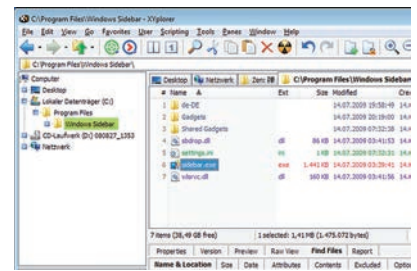
CONTACT Ashampoo
PHONE NA
EMAIL NA

RATINGS

FEATURES	★★★★★
EASE OF USE	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

Ashampoo MovieMenu lets you create professional looking menus for video DVDs and Blu-ray discs. You get 19 menu templates for various occasions, which can be customized to quite an extent. Menu buttons, text boxes, images and geometric shapes can be positioned and scaled within the template you've selected. It offers options to create additional pages and subpages as well as buttons to interlink menus or create links for titles and chapters. You can also choose background music for individual pages. The application displays a real-time preview of the interface you've created. MovieMenu is easy to use but it does have a few quirks. The choices of buttons are limited and you cannot create your own.

— feedback@chip.in



FILE MANAGER

XYPLORER

VERDICT: A powerful file manager with a hefty price tag.
FOR: Customizable toolbar, color coding, script running.
AGAINST: Pricy.

SPECIFICATIONS

\$43 (approx Rs 2,150)
www.xyplorer.com

SYSTEM REQUIREMENTS

OS: Windows all; Processor: 1 GHz equivalent; RAM: 512 MB; Disk space: 5 MB.

CONTACT Donald Lessau
PHONE NA
EMAIL NA

RATINGS

FEATURES	★★★★★
EASE OF USE	★★★★★
PERFORMANCE	★★★★★
OVERALL RATING	★★★★★
VALUE FOR MONEY	★★★★★

Xyplorer is a feature-rich file manager that offers unlimited tabbed browsing and a built-in search utility. You can view the explorer window in dual panes along with a mini tree on the left pane for easy browsing. Its standout features include color coded system files and folders, and thumbnails with detailed file information. It is fairly easy to operate, but it can be a little tricky for first-time users. The menu toolbar is customizable, allowing you to choose from 50 buttons. Additional features include scripts for quick actions, customizable keyboard shortcuts, favorite folders, and synchronizing scroll and file/folder selection between folders. The utility, though powerful, carries a hefty price tag.

— Francis D'sa

MEDIA PLAYER

Oplayer HD

\$4.99

iOS (iPad only)

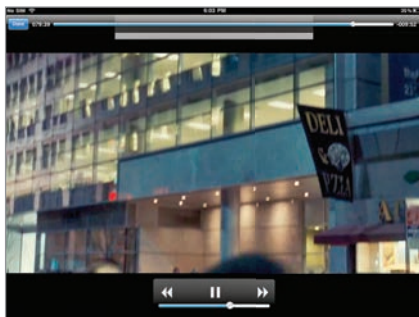
OVERALL RATING ★★★★☆

One of the most frustrating limitations of iOS devices is the inability to play media files in formats other than Apple's own preferred ones. Oplayer HD circumvents this restriction and proves there's nothing preventing

the iPad from playing AVI, WMV, and even 3GP files, hardware-wise. Files can be synced via iTunes or Wi-Fi. The neat Wi-Fi transfer mode works via any computer's Web browser: simply enter the IP address shown on screen and you'll be able to upload or download files to the iPad. Oplayer HD can also be triggered to play files saved in other apps or email clients, which overcomes another iOS restriction against

browsing the file system. Finally, you can stream audio or video from any URL. A free version that displays ad banners over your video is also available, while Oplayer for iPhone/iPod costs \$2.99. 

- Jamshed Avari



MUSIC

Aweditorium

Free

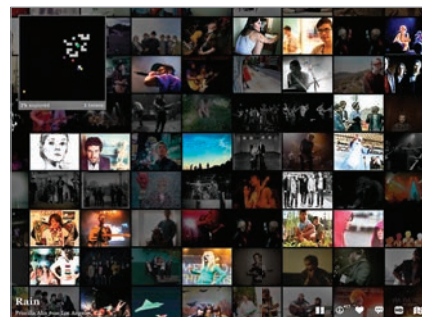
iOS (iPad only)

OVERALL RATING ★★★★☆

One of the rare apps designed especially for the iPad, Aweditorium is a brilliant tool for discovering new independent music from around the world for free. Aweditorium provides a rich visual experience through a seemingly infinite grid of tiles, each representing an artist. Tapping a tile launches their stream, with additional options to display lyrics, see popup snippets about them, share a link via Facebook

or Twitter, and of course buy the tracks from iTunes. The interface could be a little better, since it's too easy to accidentally swipe to the next tile and lose your place, and the snippet popups disrupt the music but can't be turned off. Music can continue to stream when other apps are running, so it's quite possible to spend hours discovering everything there is on offer. 

- Jamshed Avari



TRANSLATION

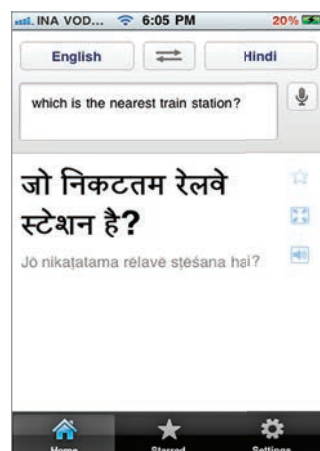
Google Translate

Free

iOS (iPad, iPhone, iPod touch)

OVERALL RATING ★★★★☆

Taking us slightly closer to a Star Trek-style future with no language barriers, the new Google Translate app for iOS is a true marvel. Google's online translation service has been widely used and well regarded for many years now, but the combination of mobile access and voice recognition make it unbelievably useful. As Android users have experienced for a while, all you need to do is select the languages you want to translate from and into, and either type or speak out what you want to say. Text translation works for 57



languages, voice recognition for 15, and voice playback for 23. Translations are pretty much instantaneous, and can be saved for later retrieval. Sadly, you can't download entire language packs, so you'll need a data connection while travelling, which is when this app would be most useful. 

- Jamshed Avari

GAME

Mirror's Edge

\$4.99

iOS (iPhone, iPod touch)

OVERALL RATING ★★★★☆

Mirror's Edge was one of the most unique and exciting videogames to come out in the last few years. Its sequel has been canceled, but fans can still take comfort in this iOS game. This version is a side scroller,

but perfectly preserves the mood and ambience of the console versions. The color palette, visual cues and even soundtrack are nearly identical. The objective is to keep your character, Faith, running as fast and fluidly as possible. Swipes are used to jump, duck, or change directions. There's also plenty of hand-to-hand combat, and you have to decide whether to run past enemies or engage them. After playing each level, you can try to set a Speed

Run record, or see how many rewards you've earned by collecting messenger bags and discovering secrets. 

- Jamshed Avari



FILE MANAGER

Root Explorer

Rs 184
Android

OVERALL RATING ★★★★★

If you have rooted your Android phone, this file explorer app is a must-have. Root Explorer is not only used to manage your SD card contents, but you can also access and modify contents of the Android system folders. A secure button called 'Mount R/W' is available on the top of the screen, which can mount the Android system partition with read and write rights. You can delete, remove or replace unwanted files such as startup boot animations or apps. Use it with extreme care as it can render your handset useless if you accidentally



delete important system files. Though you can add files to the system partition, you might reduce the internal memory and overall performance. Root Explorer also features an SQLite database viewer, binary XML viewer and options to send files via Bluetooth. 📺

- Francis D'sa

FILE MANAGER

WebSharing File/ Media Sync

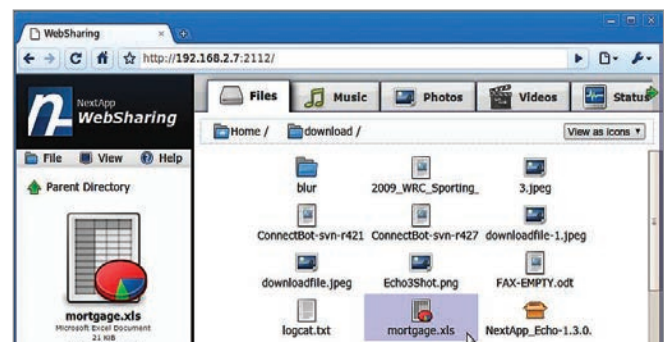
Rs 135
Android

OVERALL RATING ★★★★★

This is an excellent app for transferring or viewing your phone's SD card contents without a USB connection. Simply run the app after

turning on Wi-Fi enter the phone's IP address and port number in your browser. The browser will list the SD card contents. A security password is included added security. A tab in the browser also lists critical information such as battery status, SD card usage, etc. You can create or delete files, folders, cut, copy, paste and rename files and folders too. 📺

- Francis D'sa



PICTURE VIEWER

QuickPic

Free
Android

OVERALL RATING ★★★★★

QuickPic is a nifty image viewing app with a small memory footprint (uses just 5 MB of RAM). It's quick and offers functionalities like slideshow and managing images. When run for the first time, it scans the images on the phone and memory card and generates thumbnails. The UI is minimal and very simple. It lists the folders with images and, on selecting a folder, it displays thumbnails of images. Browsing and opening images is extremely quick. It takes around a second to open an image on the Samsung Galaxy 3, so it



would be blazingly fast on high-end handsets. QuickPic supports multi-touch and the ability to hide folders with images you don't want others to see. It also allows you to share multiple files via Bluetooth, Gmail, MMS and Picasa. 📺

- Anand Tuliani

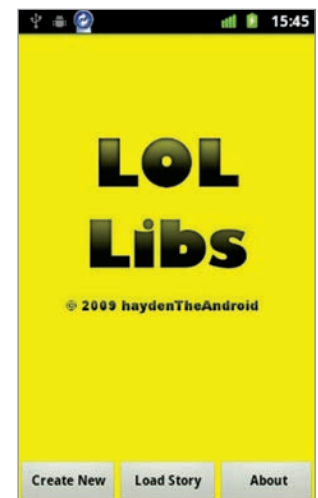
CASUAL WORD GAME

LOL Libs

Rs 89.90
Android

OVERALL RATING ★★★★★

This one would be fun at parties. You start by choosing from a list of 64 stories with titles like Finding Love, Marriage Proposal, and Losing Weight. You will then be prompted to enter names of persons, adverbs, verbs, adjectives, nouns, unit of time, etc. After you've entered all the words, you'll have a hilarious story that will have people fall off their chairs and laughing out loud. Here's an example of a marriage proposal: "When their jogging was complete, Rishi got down on his elbow and handed Deepika a glass of oil". Here



the words 'jogging', 'elbow' and 'oil' and names of people were input. The stories generated can be saved on the device or be sent via SMS or email. The app stores the suggested words in the library and uses them to generate random stories. 📺

- Anand Tuliani



How Well Do Security Suites Protect?

With improved technologies, the latest internet security suites can fight new malware. Our test shows how reliable the protection really is.

BY CLAUDIO MÜLLER AND ANAND TULIANI

Antivirus vendors are struggling endlessly against the malware surge. The number of new viruses is increasing rapidly and so is the speed at which malware writers produce destructive codes. Currently, about 55,000 new malware are written everyday. But the fact that malware are infecting in newer ways is a lot more threatening. The Stuxnet worm could be a forerunner for future disasters, even though it is aimed at industrial software and equipment and few home users. Antivirus vendors observe that Trojans, key loggers and bots are increasingly being programmed professionally and hence are becoming more dangerous. Without antivirus protection, there is a very high risk that a computer will be infected. With the help of AV-Test test laboratory, we have examined how well the current generation of security suites protect against the latest attacks.

The biggest developments in the antivirus scenario are real time behavior-

based recognition and cloud services. In fact, the conventional virus signature remains essential, but they are ineffective against new and unknown malware. Here, the security suite must analyze how an unknown application will act. For that, it monitors system changes or executes the unknown application in a secure virtual environment (sandbox). In addition, the scan engine obtains information on whether other users have already used this application once, from the databases in cloud.

Reputation: Better Real Time Protection

Reputation technologies are the most important addition to the cloud services in this year. Antivirus developers obtain data from all the used security suites (as long as the user agrees) about the origin, size or behavior patterns of unknown files, which are sent to the cloud server and are evaluated there. "With that, we can differentiate trustworthy and

potential suspicious files even before they're available in the laboratory", says Stefan Wesche, Technical Expert, Norton Products at Symantec. Reputation analysis is only one of the many detection levels; however, they help the program to decide how to deal with unknown files. You can see how this process runs in the info graphic, using F-secure as an example. This technique must be continually improved because the malware writers scrutinize the behavior analysis to outwit it. According to a statement by Symantec, they succeed for one to two weeks on an average until the developers of the security programs react to it from their end.

Our test confirms that the detection rates for unknown malwares are considerably higher than in the previous year. The detection rate was at the most 80 percent in 2009; in 2010 all programs achieved at least 85 percent. In fact, F-Secure detected all the unknown viruses, exactly like PC Tools, whose



behavior-based detection tool called ThreatFire can be downloaded for free from www.threatfire.com/download

The scanner levels that are not based on signature have also improved considerably, but yet by no means do they protect the users optimally. "The further development of the behavior-based detection and the reputation technology is the prime focus for next year", says Stefan Wesche.

Virus Detection Test

Besides the genuine viruses, the test candidates had to recognize malware programmed in the laboratory, which simulated the potential new attacks. The On Demand scanner of the security suites could not identify these zoo malware with signatures alone. The heuristics was especially required here, which analyzed the malicious code for similarities to known malware. While the top group achieved sound results and recognized between 97 and 100 percent of the Trojans, backdoors and fake antivirus programs, Kaspersky and Eset have big problems. Their hit rate is considerably below average, mainly in case of Trojans and fake antiviruses. Eset missed 90 percent of the hurdles and overlooked about 30,000 potential viruses – a highly unacceptable value. As against that, Panda proved to be very efficient: from about 270,000 samples, its suite overlooked just 646.

Nevertheless, all programs passed the

With new security suites you get...

BETTER REAL TIME PROTECTION

More effective behavior analyses protect you from unknown viruses.

SECURE SURFING

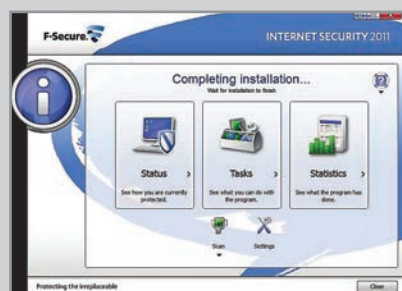
Better browser protection blocks dangerous websites and unwanted downloads.

MORE INTELLIGENT CLOUD SERVICES

The suites differentiate good applications from bad ones with reputation technologies.

SIMPLER OPERATION

Well-arranged menus inform the users without confusing them.



Simplistic With a cleaner user interface, inexperienced users can be sure they're on the right track.

mandatory test, the complete recognition of all known malware, with 100 percent results. The false alarms for harmless files were also in manageable limits. The scan engines didn't give false alarm for 11,604 Windows and Office files. F-secure and G Data managed without any errors for 135,712 files of other software. Avira struggled the most with seven false alarms in the test. In addition, Avira was very annoying with warning messages for Winzip and the Defraggler system tool. Even Google Earth was totally blocked when launched.

Malware Attack: Poor Removal

While the developers have optimized their scan engines so that they deliver good recognition rate and give out only a few false alarms, they have neglected an important point: cleaning an infected system. No security suite managed to get rid of all destructive software. The highest scorer in test: PC Tools got rid of the active component of nine out of

ten viruses, and even fixed the system changes for eight of those. McAfee and Eset lay turned down at the end; they could not remove the active components from each of the four viruses. Andreas Marx, CEO of AV-Test, said "Some manufacturers still cannot manage to end malware processes or to remove their registry entries". The manufacturers must pay keen attention to this aspect. A user who pays Rs 1,200 for a security suite should also be able to clean an infected system.

If the malware infestation is so aggressive that it deactivates the protection or you cannot start your computer at all, then only a rescue CD with live operating system helps. The virus signatures are updated after start. Unfortunately, not all vendors provide an installation CD which is bootable. In some cases, you have to create the rescue disc yourself after the installation. These programs scored less in the total evaluation, which has even cost PC Tools two places. Here, McAfee strikes negatively again. With this Internet security suite, the user cannot even create a rescue disc.

Malware protection is undoubtedly the most important criterion in the test. However if the security suite thwarts system performance, then even the most secure computer is no fun to use. Thus we also wanted to know, which suite uses the resources most efficiently. Our performance measurements confirm that there are clear differences here. BitDefender suite scored the highest here, which finished scanning the system partition very fast. Norton Internet Security, once criticized as a resource hog, achieved the second highest score thanks to the good boot time and fast scanning speed. Along with the very good malware protection, it secured top position.

System Boot-up: Snails and Sprinters

The boot time was severely affected with Kaspersky Internet Security. The boot up lasted longer than any other program with Windows taking its own sweet time to load the components and start the real time protection. As against that is Eset, whose suite lags behind in almost all tests, but manages a real coup here; the booting time extends to only a few seconds in comparison to a system

without an installed suite. Eset Internet Security certainly doesn't offer any effective protection, but it hardly delays Windows startup.

As in the previous year, the biggest differences showed again in the file scan of the system partition. Ideally the scanner should remember the analyzed



Test winner The suite by Norton offers the best allround protection and a good performance.

files and only test new or unchanged files accurately for subsequent scans. Panda, G Data and Eset took thrice as long as BitDefender for the first scan and were also not considerably fast during the second run. According to the statement from G Data, the time needed for scanning should decrease after a few runs. Six of the competitors took less time right at the time of second scan.

They showed lesser differences when decompressing archives and copying data between PC and USB flash drives. Since the circulation of malware extends to external storage devices, the antivirus should scan the data the user copies on the computer. When copying files from the PC to a flash drive, the scanner shouldn't slow down. All suites performed equally well here with a very slight difference as compared to a bare system.

Interface: Tidy and Informative

Confusing user interfaces and the pop-up messages were nuisance for a long time. The programs should show with clear symbols whether the computer is protected and how one can solve possible problems. In addition, they should only report in emergency cases so as not to distract the user. BitDefender, with three selectable interfaces for beginner, intermediate and expert, and G Data understand the requirements of the user very well and present their suites in a very neat design. F-Secure is also convincing, with clear information as well as a well thought-out menu structure, which prevents long searches.

As against that, inexperienced users find it a bit difficult to trace the required info with our test winner Norton Internet

SpecScan



1



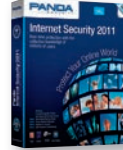
2



3



4



5



6



	NORTON INTERNET SECURITY 2011	BITDEFENDER INTERNET SECURITY 2011	F-SECURE INTERNET SECURITY 2011	PANDA INTERNET SECURITY 2011	G DATA INTERNET SECURITY 2011	PC TOOLS INTERNET SECURITY 2011	
Price: 1 PC 3 PCs	Rs 1,220 Rs 2,530	NA Rs 810	Rs 1,700 Rs 4,250	Rs 899 Rs 1,041	Rs 400 Rs 825	NA Rs 1,700	
Website	www.symantec.com	www.bitdefender.com	www.f-secure.com	www.pandasecurity.com	www.gdatasoftware.com	www.pctools.com	
Overall rating	92	91	90	88	88	87	
Malware protection (70%)	93	91	93	93	94	91	
Performance (30%)	90	91	82	75	74	77	
DATA AND MEASUREMENTS							
Unknown malware, 20 samples (fully blocked/partly blocked/not recognized)	95 %/0 %/5 %	85 %/15 %/0 %	95 %/5 %/0 %	90 %/5 %/5 %	90 %/5 %/5 %	95 %/5 %/0 %	
Trojans (1,80,027)	98.48 %	97.12 %	97.81 %	99.99 %	99.24 %	97.31 %	
Backdoors/bots/viruses/worms (66,530)	99.37 %	98.42 %	99.07 %	100.00 %	99.60 %	98.43 %	
Fake AV/adware (24,314)	98.24 %	97.52 %	97.86 %	97.42 %	99.78 %	98.43 %	
Known wild list malware (9,844)	100 %	100 %	100 %	100 %	100 %	100 %	
False alarms (1,47,316 files)	1	1	0	3	0	3	
Warning program installation/use	0/0	0/0	0/0	0/0	0/0	0/0	
Disinfection (recognized/active Parts removed/ system changes removed)	100 % / 80 % / 60 %	100 % / 90 % / 70 %	100 % / 80 % / 60 %	100 % / 80 % / 50 %	100 % / 80 % / 60 %	100 % / 90 % / 80 %	
Boot time (without suite: 47.6 s)	71.3 sec	82.2 sec	85.1 sec	71.7 sec	98.8 sec	95.9 sec	
File scan (system partition): 1st Run/2nd Run	17 min 11 sec / 1 min 27 sec	10 min 51 sec / 2 min 21 sec	14 min 19 sec / 4 min 57 sec	33 min 2 sec / 28 min 50 sec	27 min 53 sec / 28 min 2 sec	25 min 12 sec / 22 min 15 sec	
Copying 1 GB data from USB stick to PC (without suite 1 min 11 sec) PC	1 min 13 sec	1 min 18 sec	1 min 38 sec	1 min 34 sec	1 min 21 sec	1 min 12 sec	
Copying 1 GB data from PC to USB stick (without suite 5 min 3 sec) PC	5 min 20 sec	5 min 16 sec	5 min 21 sec	5 min 7 sec	5 min 11 sec	5 min 15 sec	
Decompressing 1 GB data (w/o suite: 1 min 54 sec)	1 min 58 sec	1 min 54 sec	1 min 57 sec	1 min 56 sec	1 min 56 sec	1 min 58 sec	
Rescue CD	Yes, can be updated	Yes, can be updated	Yes, can be updated	Yes, can be updated	Yes, can be updated	No, but can be created	
Rescue CD	Slightly confusing	Very clear	Very clear	Clear	Very clear	Confusing	

Security. In this case, the visual appeal goes before functionality, which causes discomfort to the user. The Internet security suite by eScan gets on the nerves with a default data scan of removable devices as soon as you connect them. This is well thought-out, but it's very disturbing and time consuming to wait for it to run a scan each time you plug in a flash drive or an external hard disk. However, the option can be disabled. As against that, the program functions in Eset's Internet security suite are not clearly explained. Terms like smart scan, in-depth scan and scan as administrator can be confusing for a beginner. Other programs explain these terms with short captions, whereas Eset leaves the users alone. The program's built-in help is also not very useful; it explains the out-dated interface of its predecessor.

Extras: Differences in Detail

It has been observed that the suites borrow the good aspects of functionality and design from each other. However, the differences lie in fine details. For instance, email protection, Web and spam filter have been a common feature for a long time, but with eScan, the user has to first activate these functions. On the other hand, Kaspersky, BitDefender and Eset offer the option to search for weak points in the system (such as lack of Windows updates).

Bigger differences appear while installing the program. While Norton was ready for start after less than a minute, Eset requested to configure the firewall filter, the association with undesired applications and behavior analysis. eScan started a system scan automatically after the installation. That is certainly sensible,

but the program had not at all updated the six week old signatures. We as well as AV-Test determined another problem with McAfee; the activation did not work because the connection with the McAfee server collapsed. According to McAfee, this problem had not occurred so far for any other user.

In addition, it's frustrating that the user must first register after the installation, to receive updates. F-Secure not only offers the best price-performance ratio, but in addition, the updated licenses of the 2010 edition use the technologies of the new version. So you can use the old licenses for life time without having to upgrade to a new version. Even though the new suites may not be perfect, they offer considerably better protection than their predecessors. 

- feedback@chip.in

7	8	9	10	11
				
AVIRA PREMIUM SECURITY SUITE	KASPERSKY INTERNET SECURITY 2011	ESCAN INTERNET SECURITY SUITE	MCAFFEE INTERNET SECURITY 2011	ESET SMART SECURITY 4
Rs 1,638 Rs 2,464	Rs 575 Rs 979	Rs 1,136 Rs 1,455	Rs 987 Rs 1,692	NA Rs 1,225
www.avira.com	www.kaspersky.com	www.escaanav.com	www.mcafee.com	www.eset.com
86	86	86	82	70
87	88	84	81	69
83	81	89	85	74
85 %/15 %/0 %	95 %/0 %/5 %	85 %/0 %/15 %	75 %/15 %/10 %	85 %/5 %/10 %
98.75 %	94.87 %	97.03 %	98.43 %	86.65 %
99.60 %	97.96 %	98.82 %	99.27 %	96.12 %
99.14 %	95.65 %	98.14 %	98.87 %	89.08 %
100 %	100 %	100 %	100 %	100 %
7	1	3	7	6
1/3	0/0	0/0	0/0	0/0
100 % / 80 % / 50 %	100 % / 80 % / 50 %	100 % / 80 % / 30 %	100 % / 60 % / 40 %	100 % / 60 % / 10 %
77.9 sec	114.7 sec	77.1 sec	66.0 sec	51.6 sec
18 min 4 sec / 17 min 21 sec	26 min 25 sec / 5 min 48 sec	23 min 35 sec / 2 min 21 sec	31 min 33 sec / 8 min 42 sec	28 min 18 sec / 27 min 08 sec
1 min 16 sec	1 min 17 sec	1 min 19 sec	1 min 17 sec	1 min 26 sec
5 min 4 sec	5 min 5 sec	5 min 7 sec	5 min 8 sec	5 min 16 sec
1 min 59 sec	1 min 57 sec	1 min 54 sec	1 min 58 sec	2 min 9 sec
No, but can be created	Yes, can be updated	No, but can be created	No, cannot be created	No, but can be created
Clear	Slightly confusing	Slightly confusing	Clear	Confusing

New risks from the Internet

Intelligent malware hide better and spy on users

Creators of viruses, Trojans and other forms of malware are continuously developing new and more powerful attack methods to get through our PCs' defenses. The antivirus developers have revealed the risk trends of the next months to us.

BEHAVIOR SPYING

The more strongly people connect digitally (for example via social networking), the more details of their personal relations and likings can be derived. Israeli researchers warn that this information can lead to newer malware. Attackers could buy the data, publish or blackmail the user with it.

SPECIAL VIRUSES

Similar to Stuxnet in industrial facilities, malware may soon also attack specific users. The risk: The virus resides only on a few computers and it's difficult for antivirus developers to discover it. As soon as exploit kits are no longer economically viable, such attacks will begin.

PROFESSIONALISM

Cyber criminals team up with professional bands to bundle their resources. Thus they can develop new trojans, which disguise better from security suites.

Long Term Test

The CHIP Test Center steps out of the lab and into the

MOBILE PHONE

iBALL AASAAN

It's good to see Indian companies like iBall coming up with phones tailored for an audience, which hasn't been addressed by any brand yet—senior citizens. With an extra-large keypad and an amber lit dot-matrix display with extra-large fonts, farsighted elderly people won't need reading glasses for dialling numbers and reading text on the screen. To find out how *aasaan* it really is to use, I decided to take a short break from my Android phone. The elders at home were pleased to see the large keypad with 1.5 cm square buttons and large-font display. However, they found the Rs 3,099 price high. "It should've been around Rs 1,500," they said.



The first thing I noticed was that the charger's pin resembled the thin pin on Nokia chargers. I pulled out my old Nokia charger and gently pushed the pin into the phone's charging jack. Surprisingly, it worked! The features are so limited that I could thoroughly go through them in less than 10 minutes. The UI is extremely simple, which is a big plus since it's targeted at senior citizens. The hotkeys on the sides for FM radio, LED torch and keypad lock are a great idea. The FM radio doesn't require the hands-free to be plugged in and the tiny speaker on the rear is really loud. The ring tones are also extremely loud.

Next, I tried making calls and messaging.

The contact list shows just names of people; you'll have to go deeper to view the number. The earpiece didn't sound very clear although it was loud, and it was quite difficult to understand what the person at the other end was saying. Those who are used to the T9 dictionary for messaging will find it cumbersome because the only text input mode is multi-tap. Correcting errors is also inconvenient because there are no sideways directional buttons.

The most useful feature in this phone is the big red SOS switch on the rear. You can set five numbers as SOS contacts, and on activating SOS, the phone triggers a loud alarm and automatically starts calling these numbers. However, the SOS mode got activated a couple of times while pulling the phone out from my pocket. Thankfully I hadn't configured the SOS list. The battery lasted for about three days with moderate usage. This phone is a good initiative by iBall. It would be great if the quirks are worked upon and the price is lowered to make it more affordable for people from lower income groups. 

- Anand Tuliari

NETBOOK

WIPRO EGO

I own a fairly powerful desktop PC, but I found myself using it for just word processing, Internet browsing, chat and entertainment. So I decided to try out a netbook, which offers better mobility and power saving. I opted for the Wipro EGO, which featured standard netbook specifications - Intel Atom 1.6 GHz, 160 GB hard drive, and 2 GB RAM. It has an extremely good build quality, enough (three) USB ports, WLAN (802.11 b/g) and a decent 10.1-inch display, which seemed suitable for my requirements. It came pre-installed with Windows XP Home Edition. I switched to Windows 7 Ultimate and found that it was performing even better. However, the glossy shell and display made it a fingerprint nightmare.

A month into the switch, I noticed a dead pixel, but ignored it because the miniscule problem was not worth opting for a warranty replacement. I was comfortable using it for Web use and word processing, until I noticed that my productivity was declining. The keyboard had tiny keys, and typing on it felt sluggish. I found the touchpad randomly moving haywire. I had no option but to add an external keyboard and mouse to get a little more relaxed. Then the smaller screen size and lack of an optical drive started to bother me.

I came to the conclusion that netbooks just aren't for me. When powerful processing such as video encoding and multi-tasking programs were needed, I was handicapped. I hung on for some more time and kept using. Then the battery went dead; just 13 months after buying it (a month after the warranty expired). Instead of spending a few thousands on a new battery, I chose to run it via the charger itself. But a few weeks down the line, I found the WLAN interface also giving up, especially failing after prolonged use. The last straw was the company logo sticker on the lid starting to disappear. It now reads "W RO GO".

Though the Wipro EGO has a good build quality, is not all that ergonomic. If you're thinking of buying a netbook, I would recommend that you consider these aspects closely. Spend a little extra and ensure that the one you buy is perfect for your needs. As for me, I switched back to my bulky, power-hogging desktop PC. 

- Francis D'Sa



real world!

NAS DEVICE

BUFFALO LINKSTATION PRO

Network-attached storage has traditionally been used only in offices, but most homes with broadband connections have now become networked homes. Even appliances such as TVs and game consoles can live on the network, so why not unite them? NAS drives can do all of that, plus save power and create safe backups.

Buffalo's LinkStation Pro NAS is one of the most feature-rich devices I've come across; so much so that it might scare off some home users. Buffalo includes a CD with a little application called NASNavigator, which seemed to only be simple front-end that duplicates the functionality of the admin page and a few Windows Explorer functions, such as mapping shares to a drive letter. Upon further investigation, it transpired that the software is also needed for the NAS's power saving features. When set to 'Auto' mode, the device will periodically search for running instances of NASNavigator. If it doesn't find any, it will assume you've shut down all your computers, and will power down the drive. A useful touch, unless phones and game consoles need to access the drive.

The LinkStation Pro uses a Gigabit Ethernet interface, but even when used with an older PC, it achieved transfer speeds of around 12 MB/s. This is at four times faster than a hard drive plugged into a USB-compatible router, and makes syncing a lot more convenient. Apart from the expected DLNA for streaming media, you can host entire websites and MySQL databases. You can also schedule backups through the firmware, though dedicated software would be more flexible. You can even use the USB port to connect an additional hard drive or a printer.

Setting up users and permissions turned out to be quite a hassle, with only vague instructions helping me through a confusing array of options. I'd highly recommend password-protecting shared storage, so in this regard the LinkStation Pro would be difficult for the average user to configure.

An NAS drive makes sense if you want to really enjoy sharing and streaming media files around the home, but I don't think the LinkStation Pro is a great choice for home users due to its confusing network configuration. In fact, I see an untapped market here for simple, plug-in home storage solutions. 

- Jamshed Avari





**Asus GTX 560 Ti
Direct CU II Top**
Rs 17,000

in.asus.com

VERDICT Factory-overclocked, excellent cooler and brilliant build - worth the price.

LOVE Excellent cooler, brilliant build, factory-overclocked.

HATE The cooler design makes it the lengthiest.

SPECIFICATIONS

Card length: **250 mm**; Core speed: **900 MHz**; Memory speed: **1050 MHz**; Video outputs: **DVI and mini-HDMI**.

ANAND'S PICKS

NVIDIA GEFORCE GTX 560 TI GRAPHICS CARDS

Build a gaming PC with the best mid-range GPU around.



**Zotac GeForce GTX 560 Ti
AMP!**
Rs 16,000

www.zotac.com

VERDICT The fastest GTX 560 Ti graphics card at an awesome price.

LOVE Good custom cooler, factory-overclocked, includes Assassin's Creed: Brotherhood.

HATE No DisplayPort, a regular HDMI port would have been better.

SPECIFICATIONS

Card length: **209 mm**; Core speed: **950 MHz**; Memory speed: **1100 MHz**; Video outputs: **DVI and mini-HDMI**.

**Palit GeForce GTX 560 Ti
Sonic**
Rs 18,500

www.palit.biz

VERDICT It's so compact that it fits into a micro-ATX cabinet.

LOVE Compact design, factory-overclocked, good choice of outputs.

HATE The quality of components used could have been better.

SPECIFICATIONS

Card length: **187 mm**; Core speed: **900 MHz**; Memory speed: **1050 MHz**; Video outputs: **DVI, D-sub and HDMI**.



Zotac GeForce GTX 560 Ti
Rs 15,000

www.zotac.com

VERDICT The most affordable GTX 560 Ti in the market.

LOVE Good value for money, 5 years warranty (3 years extended), lean design.

HATE None.

SPECIFICATIONS

Card length: **209 mm**; Core speed: **823 MHz**; Memory speed: **1002 MHz**; Video outputs: **DVI, DisplayPort and HDMI**.

Sparkle GeForce GTX 560 Ti
Rs 18,500

www.sparkle.com.tw

VERDICT This one uses Nvidia's reference design but commands a premium.

LOVE Reference cooler does a good job, sweet and simple design.

HATE Expensive as compared to the rest.

SPECIFICATIONS

Card length: **229 mm**; Core speed: **823 MHz**; Memory speed: **1002 MHz**; Video outputs: **DVI and mini-HDMI**.





BUILD A MID-RANGE GAMING PC USING A SIX-CORE CPU AND NVIDIA GTX 560 Ti

ANAND TULIANI, DEPUTY EDITOR - TECHNICAL

MID-RANGE GAMING PC

Mid-range gaming PCs pack just enough power for gaming at 1920x1080 and at the same time they aren't too heavy on the wallet. Along with the power to churn out eye candy, mid-range PCs have the oomph to seamlessly handle demanding applications like Photoshop and video transcoding. The ideal budget for a mid-range gaming PC is Rs 60,000, but you have to make a smart choice of hardware.

The graphics card is the most critical component of a gaming PC. It should not only be able to handle game play at 1920x1080 with medium to high settings, but also be capable of handling tessellation and PhysX well, because many upcoming games will make use of these features for more realistic graphics and physics. Currently, the GeForce GTX 560 Ti fits the bill perfectly. Priced at Rs 15,000, the Zotac GeForce GTX 560 Ti offers the best value for money. It's the most affordable model, comes with Assassin's Creed: Brotherhood (download coupon) and carries a five-year warranty, which no other brand offers.

Next, the core components and storage. Intel's new Sandy Bridge CPUs are too expensive at the moment, so quad-core and six-core Phenom II CPUs are ideal. The Phenom II X6 1055T is the cheapest six-core CPU and packs good number-crunching power. The Asus M4A88TD-M EVO/USB3 is the best-performing AMD 880G chipset-based motherboard. It uses components of top-notch quality and is equipped with USB 3.0 ports, 128 MB of dedicated memory for its on-board Radeon HD 4250

GPU and FireWire and eSATA ports. 4 GB DDR3 RAM and 1 TB hard drive are standard these days. 2 TB hard drives have become cheaper (average price Rs 5,100), but 1 TB drives still offer great value. Want a mean-looking case with LED fans and transparent side panel that's affordable? Buy the Cooler Master Elite 430. A good display is vital; go for a full HD LED display with an HDMI port. The BenQ V2210 is a good option if you don't want to spend a bomb. Speakers are a subjective choice; the F&D A520 isn't very expensive and it's thumpy bass is suited for gaming.

The price of the PC without the operating system would be a little less than Rs 60,000. Bear in mind that Windows 7 license can cost anywhere between Rs 4,100 to Rs 10,500, depending on the version. 

- anand.tuliani@chip.in

TESSELLATION AND PHYSX WITHOUT HICCUPS IS IMPORTANT FOR UPCOMING GAMES.

Component	Model	Price (Rs)
Component	Model	Price (Rs)
Processor	AMD Phenom II X6 1055T, 2.8 GHz	9,100
Motherboard	Asus M4A88TD-M EVO/USB3	6,400
RAM	2 x 2 GB Kingston DDR3-1333	2,600
Hard disk	Western Digital Caviar Green 1 TB	2,750
Graphics Card	Zotac GeForce GTX 560 Ti, 1 GB	15,000
Optical Drive	LG GH22-LS40, 22x SATA DVD-RW	950
Cabinet	Cooler Master Elite 430	2,700
Power supply	Corsair CX430, 430 Watt	2,550
Monitor	BenQ V2210, 21.5-inch LED	9,700
Input devices	Logitech G1 Gaming Desktop	1,450
Speakers	F&D A520, 2.1 stereo	3,540
		56,740



PC CONFIGS

GAMING - ENTRY-LEVEL **Rs 41,690**

Processor	AMD Phenom II X2 560 Black Ed, 3.3 GHz	5,200
Motherboard	Asus M4A88T-M, AMD 880G	4,750
RAM	2 GB Strontium DDR3-1333 MHz	1,300
Hard disk	Seagate Barracuda 7200.12 - 1 TB SATA	2,750
Graphics card	Sapphire Radeon HD 5750 - 1 GB DDR5	6,700
Optical drive	LG GH22 SATA 22x DVD-writer	950
Monitor	Samsung SyncMaster B2030N - 20-inch LCD	6,600
Keyboard	Logitech G1 Gaming Desktop	1,700
Mouse	Included in Combo	-
Speakers	F&D FD600	2,990
Sound card	Onboard high-definition audio	-
PC Case	Cooler Master Elite 310	1,900
Power supply unit	Cooler Master Extreme Power Plus - 460W	2,550
Operating system	Windows 7 Home Basic	4,300
TOTAL		41,690

GAMING - HIGH-END **Rs 1,36,350**

Processor	Intel Core i7-2600, 3.4 GHz	15,700
Motherboard	Asus P8P67 Pro, Intel P67	12,900
RAM	Corsair XMS3 TW3X4G1333C9DHX (4 GB kit)	4,200
Hard disk	2x Western Digital Caviar Black - 1 TB (RAID 0)	9,100
Graphics card	Zotac GeForce GTX 580 - 1536 MB DDR5	28,750
Optical drive	LG GH22 SATA 22x DVD-writer	950
Monitor	Benq V2400 Eco - 22-inch TFT (LED)	17,500
Keyboard	Razer Lycosa	3,800
Mouse	Razer Imperator	3,150
Speakers	Creative Gigaworks T3	16,000
Sound card	Asus Xonar DX 7.1-channel	5,000
PC Case	Cooler Master CM690 II Advanced	5,400
Power supply unit	Cooler Master Silent Pro M700 - 700 Watts	7,600
Operating system	Windows 7 Home Premium	6,300
TOTAL		1,36,350

HOME **Rs 26,990**

Processor	AMD Athlon X2 250, 3.00 GHz	2,700
Motherboard	Gigabyte 880GM-UD2H, AMD 880G	4,900
RAM	2 GB Kingston DDR3-1333 MHz	1,300
Hard disk	Western Digital Caviar Green - 500 GB SATA	1,900
Graphics card	Onboard graphics	-
Optical drive	LG GH22 SATA 22x DVD-writer	950
Monitor	Samsung SyncMaster B2030N - 20-inch TFT	6,600
Keyboard and mouse combo	Logitech Deluxe 250 Desktop USB	795
Speakers	Altec Lansing VS2621	1,895
Sound card	Onboard high-definition audio	-
PC Case	iBall Pride	1,650
Power supply unit	Included with the PC Case - 250 Watts	-
Operating system	Windows 7 Home Basic	4,300
TOTAL		26,990

HTPC **Rs 93,695**

Processor	AMD Athlon II X4 635, 2.93 GHz	4,500
Motherboard	Asus M4A88TD-M EVO/USB3	6,400
RAM	2x 2 GB Kingston DDR3-1333 MHz	2,600
Hard disk	Western Digital Caviar Green - 1 TB	2,750
Graphics card	Sapphire Radeon HD 5570, 1 GB	4,800
Optical drive	Sony BC-5100S-OB, 24x SATA Blu-ray combo	8,700
Monitor	BenQ V2400 Eco, 24-inch TFT (LED)	17,500
Keyboard and mouse combo	Logitech Wireless Combo MK320	1,795
Speakers	Logitech Z-5500 Digital	15,500
Sound card	Asus Xonar DX 7.1-channel	5,000
PC Case	Silver Stone LC16B MR220	11,800
Power supply unit	Corsair CMPSU-430CX - 430 Watts	2,750
TV tuner card	Avermedia AverTV Speedy PCIE	3,300
Operating system	Windows 7 Home Premium	6,300
TOTAL		93,695

LAPTOP CONFIGS

BUDGET

PROCESSOR Intel Celeron, Pentium Dual-Core,
1.73 GHz to 2 GHz AMD Turion X2, 2.1 GHz
MEMORY 1 GB or 2 GB
HARD DRIVE 160 GB, 250 GB, 320 GB
DISPLAY 14.1-inch or 15.6-inch
GRAPHICS On-board
WEIGHT 2.3 Kg to 2.7 Kg
OTHER Bluetooth, DVD-writer, Wi-Fi b/g, Webcam
PRICE RANGE Rs 23,000 to Rs 35,000



HP COMPAQ PRESARIO CQ42-233TU

Rs 25,500

CPU Intel Pentium Dual-Core T4500, 2.3 GHz;
MEMORY 2 GB; **HARD DISK** 500 GB;
DISPLAY 14-in; **GRAPHICS** On-board;
WEIGHT 2.2 Kg; **OS** Free-DOS;
OTHER Bluetooth, Wi-Fi, Webcam, Card reader



LENOVO IDEAPAD G560 59-050857

Rs 26,300

CPU Intel Pentium P6100, 2.0 GHz; **MEMORY** 3 GB;
HARD DISK 500 GB; **DISPLAY** 15.6-in;
GRAPHICS On-board; **WEIGHT** 2.6 Kg; **OS** Free DOS;
OTHER Bluetooth, HDMI, Card reader, Webcam



ACER ASPIRE 4738Z

Rs 26,999

CPU Intel Pentium P6200, 2.13 GHz; **MEMORY** 2 GB;
HARD DISK 500 GB; **DISPLAY** 14-in;
GRAPHICS On-board; **WEIGHT** 2.4 Kg;
OS Linux; **OTHER** Bluetooth, Wi-Fi, Webcam, HDMI



TOSHIBA SATELLITE L640-I4012

Rs 29,490

CPU Intel Core i3-350M, 2.26 GHz; **MEMORY** 2 GB;
HARD DISK 320 GB; **DISPLAY** 14-in;
GRAPHICS On-board; **WEIGHT** 2.26 Kg; **OS** Linux;
OTHER Bluetooth, Wi-Fi, Webcam, HDMI

MAINSTREAM

PROCESSOR Intel Core i3, 2.1 GHz or higher,
Intel Core i5, 2.26 GHz or higher.
MEMORY 2 GB or 3 GB
HARD DRIVE 250 GB or 320 GB
DISPLAY 14.1-inch or 15.4-inch
GRAPHICS On-board or Discrete
WEIGHT 2.3 Kg to 3 Kg
OTHER Bluetooth, DVD-writer, Wi-Fi b/g or n, Webcam
PRICE RANGE Rs 35,000 To Rs 45,000



SONY VAIO VPCEB42EG

Rs 35,990

CPU Intel Core i3-380M, 2.53 GHz; **MEMORY** 2 GB;
HARD DISK 320 GB; **DISPLAY** 15.6-in;
GRAPHICS On-board; **WEIGHT** 2.7 Kg;
OS Windows 7 Home Basic;
OTHER Bluetooth, Wi-Fi, HDMI, eSATA



DELL INSPIRON 15R

Rs 37,486

CPU Intel Core i3-380M, 2.53 GHz; **MEMORY** 3 GB;
HARD DISK 320 GB; **DISPLAY** 15.6-in;
GRAPHICS Radeon HD 550v, 1 GB;
WEIGHT 2.6 Kg; **OS** Windows 7 Home Basic;
OTHER Bluetooth, Wi-Fi, Webcam, HDMI



LENOVO IDEAPAD Z560 59-065299

Rs 41,990

CPU Intel Core i5-480M; **MEMORY** 4 GB;
HARD DISK 640 GB; **DISPLAY** 15.6-in;
GRAPHICS Nvidia GeForce 310M, 512 MB;
WEIGHT 2.6 Kg; **OS** Windows 7 Home Premium;
OTHER Bluetooth, Wi-Fi, Webcam, HDMI



ACER TIMELINEX 4820TG

Rs 45,692

CPU Intel Core i5-460M, 2.53 GHz; **MEMORY** 3 GB;
HARD DISK 500 GB; **DISPLAY** 14-in;
GRAPHICS Radeon HD 5650, 1 GB; **WEIGHT** 2.2 Kg;
OS Windows 7 Home Premium;
OTHER Bluetooth, Wi-Fi, Webcam, HDMI

DESKTOP REPLACEMENT

PROCESSOR Intel Core i5, Intel Core i7
MEMORY 3 GB or more
HARD DRIVE 500 GB or more
DISPLAY 15.4-inch to 17-inch
GRAPHICS GeForce GT435M or higher,
Radeon HD 5650 or higher
WEIGHT 2.5 Kg to 5 Kg
OTHER Bluetooth, DVD-writer or Blu-ray, Wi-Fi n,
Webcam, TV Tuner
PRICE RANGE Rs 45,000 to Rs 1,50,000



LENOVO IDEAPAD Y560 59-052245

Rs 56,000

CPU Intel Core i5-450M, 2.4 GHz; **MEMORY** 4 GB;
HARD DISK 640 GB; **DISPLAY** 15.6-in;
GRAPHICS ATI Mobility Radeon HD 5730, 1 GB;
WEIGHT 2.6 Kg; **OS** Windows 7 Home Premium;
OTHER Bluetooth, Wi-Fi, Webcam, HDMI



DELL XPS 15

Rs 62,683

CPU Intel Core i5-480M, 2.66 GHz; **MEMORY** 6 GB;
HARD DISK 500 GB; **DISPLAY** 15.6-in, Full HD;
GRAPHICS Nvidia GT 420M, 1 GB;
WEIGHT 2.8 Kg; **OS** Windows 7 Home Premium;
OTHER Bluetooth, Wi-Fi, Webcam, Card reader



SONY VAIO VPCEC35FG/BI

Rs 64,990

CPU Intel Core i5-560M, 2.66 GHz; **MEMORY** 4 GB;
HARD DISK 1 TB; **DISPLAY** 17.3-in;
GRAPHICS ATI Radeon HD 5650, 1 GB;
WEIGHT 3.4 Kg; **OS** Windows 7 Home Premium;
OTHER Bluetooth, HDMI, Webcam, Card reader



SONY VAIO VPFC136FG/BI

Rs 89,990

CPU Intel Core i7-740 QM, 1.73 GHz;
MEMORY 4 GB; **HARD DISK** 500 GB; **DISPLAY** 16.4-in;
GRAPHICS Nvidia GeForce GT425M, 1 GB;
WEIGHT 3.2 Kg; **OS** Windows 7 Home Premium;
OTHER Bluetooth, Wi-Fi, Blu-ray combo, eSATA



YOU'RE BEING TRACKED!



Offers screaming at you to “check in” are everywhere, and all your friends are posting about the cool new restaurant they’ve just discovered. What’s the meaning of all of it, and is it really a good idea to broadcast so much information?

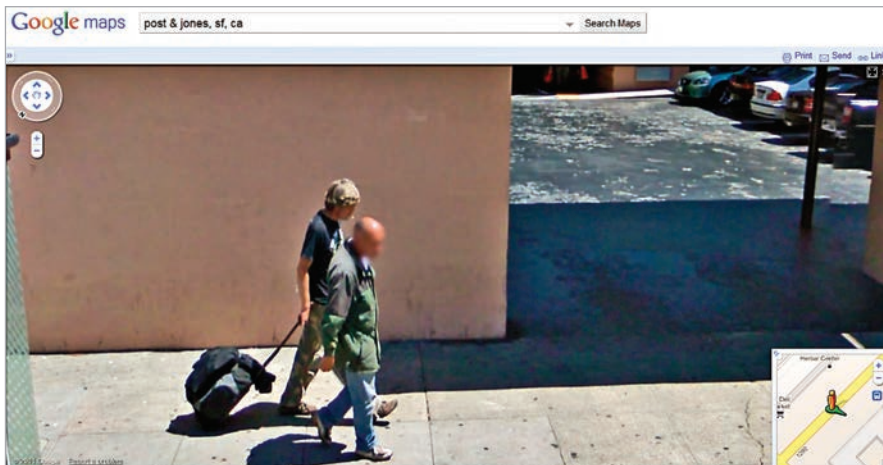
BY JAMSHED AVARI

[Directions](#) [Search Nearby](#) [Save to...](#) [More ▾](#)

GPS started out as a military tool, then made its way into cars, and then became a killer feature on portable devices such as smartphones. Companies started seeing profits in adding point-to-point directions, voice callouts, and landmarks. Then came the places of interest: cafes, restaurants, essential services, and the like. Innovative services sprang up, turning these vast databases of places and things into guides, recommendation resources, and even games. Most recently, social networks have started competing for your precise location information, tempting you to check in or tag things and places for your friends to see. We’re already hooked to the Web and to our social networks, and now location awareness is adding a whole new dimension to both, bringing them closer and making them more personal than ever.

Location information is worth billions of dollars, and every single company is betting on it. According to Google, over 150 million people now use Google Maps on their mobile phones, which is 40 percent of the service’s total users. From established giants Google and

Facebook to newer names such as Foursquare, attention is shifting from the desktop to the mobile phone. Using phones and locations, companies can engage individuals on scales and at depths that were simply unimaginable before. A lot of creative thinking is going into location-aware advertising, marketing and even entertainment. People are gravitating towards these new applications not only because they’re much more engaging, but also because they just make it so much faster and easier to find places that will help you get things done. Who wouldn’t check in with a free application that constantly tracked sales and promotions going on nearby? Who wouldn’t like live traffic updates that tell you how long it’s going to take to get somewhere, in any city anywhere in the world? Which businessperson wouldn’t create a listing with Google if they knew it would place them front and center in search results for people in the area? Which tourist would think it not worth it to install an app on their phone that could not only help them plan their trip better, but also provide the best tips that previous travelers have posted?



Privacy: Google Earth has started obscuring the faces of people its cameras pick up, but is that enough?

"GEOSOCIAL" NETWORKS AND NEW FUNDAMENTALS

Google, Facebook, Foursquare, Twitter and every other big name you can think of, are vying for your loyalty when it comes to location check-ins. The systems usually rely on you using your smartphone to confirm where you are and what you're doing. The services then publish this information for all your friends to see and comment on. In the moment, it's a fun way to stay in touch with friends and share experiences right as they are happening. Later on, location tags help you recollect your activities, organize photos, and classify friends and contacts.

Location might have been just another option on top of regular social networking updates if the existing giants had caught on first, but as usual, newcomers to the scene created the kind of applications that got people really interested. Foursquare, the most widely known and used social networks primarily designed around general location tagging, created an environment almost like a game, in which users could compete to be the most active in a certain area or at a particular establishment, and earn trophies by checking in to specific places a number of times. There are other incentives to keep checking in wherever you go, such as reading other peoples' comments about a place, discovering deals or recommendations, and even meeting new people who enjoy the place or a particular feature of it. You can create to-do lists and receive reminders when you're near the places where they need to be done. Gowalla, a similar service that didn't become as popular, has branched out into

creating resources for travelers, with users creating and suggesting points of interest and optimal routes for tourist trips.

Facebook is trying to get in on the check-in action, but sadly arrived on the scene a bit too late and is yet to demonstrate anything unique enough to attract users en masse. Twitter, on the other hand, not only lets you tag your posts with geolocation tags, but also lets application developers use this information freely. Twitterrific was one of the first clients to allow users to search solely on the basis of proximity, with the radius starting at 1km. It's a powerful way to discover people close by. Those concerned about their privacy can choose to disallow pinpoint accurate location tags. Google is widely rumored to be working on its own next-generation social network, in which proximity and geotags will play an important role. The company has already experimented with Latitude, Maps, Hotpot, and its Local tools for businesses. Recent statements indicate that Google is also actively researching ways to help people find places inside large buildings and campuses where GPS signals are typically poor.

EMPOWERING BUSINESSES AND CONSUMERS

Location-aware devices, services and apps help businesses attract new users, and build loyalty with or offer new services to existing users. Location-aware apps such as Layar and Localscope pick up listings from sources as diverse as Google Maps and Twitter. Tourists and business travelers in new cities obviously benefit by being able to discover restaurants

INDUSTRY VOICE



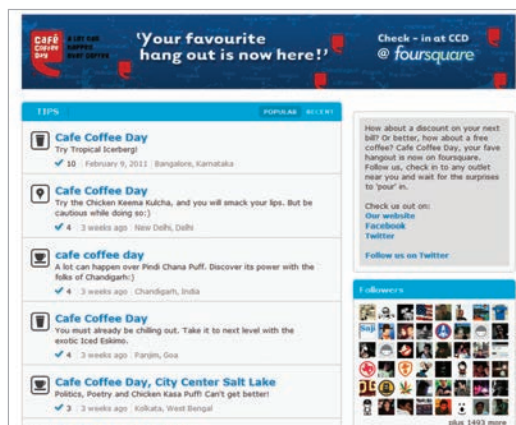
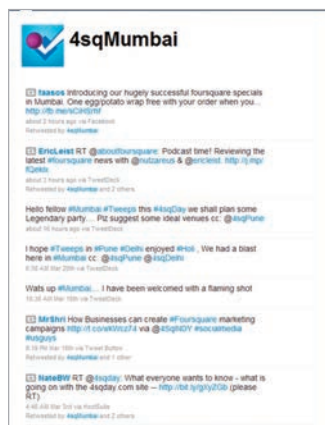
CHRISTEN KROGH
CDO,
Opera Software

People are developing mobile sites that aren't just the same thing for a smaller screen. They're using the tilt sensors, accelerometers, and GPS functions that are unique to mobile phones. Where do you see this going?

This is getting popular, the mobile deliverables like the geolocation standard. I think that says, geolocation can be determined on the PC, you can determine location from the Wi-Fi connection and get a map of your surroundings, and now people are realizing that it's different on the mobile phone; that the mobile phone is a personal device; I carry it close to my body and I don't lend it out to people. It's personal and it knows where I am, so I can use services which know where I am and that's OK. I'd be more concerned using that on a PC, especially an office PC. I think we will see the advent of a much more social and personal web services on mobile devices than we find on the PC. We're on to something really important but we don't know yet how it's going to pan out. I think yes, you'll see applications that are aware of whether they are on a phone or a desktop; you'll see ones which aren't aware and you'll also see separate applications for mobiles and desktops, the whole breadth of options.

How are people taking advantage of smartphones, on which GPS can be taken for granted and other sensors are becoming widespread?

Exactly, you have now the voice APIs, and organizations like the W3C are still looking at that, and now what will the API be for this kind of platform capability? How do we expose it through the web page and web standards? It's work in progress really, so we're taking one thing after another. Geolocation is OK, but now we're discussing how other things are going to be exposed. You'll find that Opera is one of the most active companies in the world in the standardization organizations, we have lots of people in the various committees for web standards.



Ups and downs: Foursquare is now running a number of promotions with local partners. Other websites aren't so enthusiastic about sharing location details.

and laundry services, for example, but even long-time residents of an area who pass by places every day, might stop and try them out if they discover them to be interesting or convenient.

Café Coffee Day became the first Indian brand to partner with Foursquare in February, with a scheme that encourages users to check in each time they visit an outlet. Users get a 15 percent discount for checking in at least thrice, while "mayors", the most loyal, get a free coffee and a 20 percent discount every third time they visit. Café Coffee Day is encouraging its customers to be more loyal and visit repeatedly in order to receive discounts. Faaso's, a smaller Pune-based fast food chain, is offering similar freebies. How else can businesses create buzz? By offering

special deals that unlock only if a certain number of people check in each day, by offering discounts to a limited number of check-ins per day, by encouraging groups of friends to check in en masse, and, of course, by encouraging people vie to become a place's mayor. The competitive angle alone will attract repeat business!

Location is also going to impact advertising in a major way. Imagine receiving SMS alerts for sales, special menus, or spot discounts when you walk within a few meters of a shop, restaurant or cinema. Various schemes are being tested (both opt-in and otherwise) that would allow businesses to target customers within geographically defined boundaries. By cross-referencing existing databases (which already segregate

people by age, income, taste, and shopping history), a super-specific group of high-value individuals can be targeted, that too within specified timeframes.

Other slightly related business applications are people tracking and theft recovery. With GPS becoming popular and even embedded cellular Internet connections flourishing, ordinary people now have access to GPS tracking devices much the same as the ones that criminals are fitted with. Wary parents can keep track of their children, and businesses can track sensitive parcels unobtrusively, at low cost, and quite possibly without even the tracked subject's knowledge. Similarly, it isn't just car manufacturers who can offer theft recovery services now. For example, Apple's 'Find my iPhone'

INDUSTRY VOICE

What kind of audience is there for location-based apps and services in India?

This segment is growing day by day with better handsets popping up in the market with GPS and social capabilities. I see users in the age group of 22 to 40 majorly being a part of this audience, considering the fact that they are at the start of their careers and are excited with the possibilities. Additionally, there is the high income segment which can afford unlimited data, and an iPad or a tablet.



PUSHKAR CHITALE
Sr Manager -
Developer
Community, Mauj

What value does location awareness add to your products?

Today a lot of apps have a social gaming component to increase user engagement, in which rewards are given out to the user. It's as simple as acknowledging your location, also known as a "check-in", with virtual rewards like a picture or a badge for the user's profile. This certainly increases the users' connect with that application and surely adds value.

How is location-based technology changing the way mobile apps and value-added services are developed? Who are the primary users?

It enables them to find out their location, points of interest, and their friends' locations, and share such updates with their community of friends. Airtel has a buddy finder service which works without a data plan by simply dialing a USSD string (*321*88#), which has around 110 million users. I don't think there's a fixed segment of users for this, but yes, we can bracket them as smartphone users with data plans and GPS capabilities.

What potential do you see in this space? What plans do you have to tap it?

I see tremendous potential in this space and am sure there will be a whole lot of new apps and games based on location based services making the user more and more part of the experience. We are closely following the developments in this area and will be cautious in selecting apps and games which we promote through Mobango, considering that there will be an excess of them in the coming years, and quality should win over quantity.

service is free to all its customers. Users who register their products can trace the whereabouts of their missing hardware, cause messages to flash on screen and alarms to beep, and in the worst case, even remotely wipe the device's memory to prevent sensitive data from leaking.

THE DARK SIDE

In the early days of Foursquare, a social experiment called Please Rob Me exposed ways in which users' checkins could be used against them. Luckily there was no malicious intent, and the message certainly came through.

The most obvious downside of wantonly sharing updates about your exact location is that you expose yourself to unwanted attention. In most cases, the general public has no business knowing exactly where you are and what you're eating. Stories of people fending off stalkers and crazed exes are far too numerous to simply brush off. It's also just as dangerous to advertise where you aren't—criminals will happily follow your moves to identify times when your house is empty and waiting to be burgled. It would be easy to establish patterns of your movements and thus

target either you or your property when it's most vulnerable. Many people are already inadvertently sharing much more on Facebook and other services than they ever intended to, making it difficult to estimate the actual risks of using location-specific services. Adding specific location information to that mix creates even more scope for confusion and abuse. As with anything else, users are cautioned to check all their security and privacy settings thoroughly, and stay aware of common bugs, weaknesses, scams, and fraud techniques. 

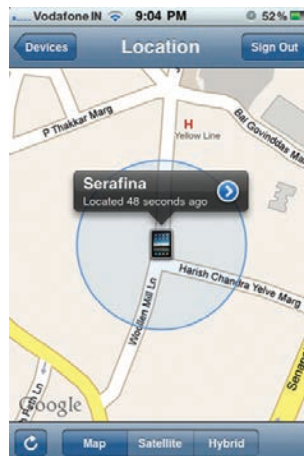
- Jamshed Avari

THE BEST LOCATION-AWARE APPS



ZOMATO

Discover restaurants nearby and get recommendations based on your tastes.



FIND MY IPHONE

Track down your missing iOS device and disable it if it falls into the wrong hands.



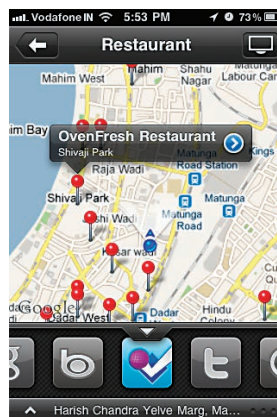
FOODSPOTTING

A visual guide to food, this one can suggest places nearby to find your favorite dishes.



WAZE

Users contribute live updates about traffic snarls as they encounter them.



LOCALSCOPE

This app harnesses search and social services to find you useful places nearby.



RUNKEEPER

Track your every movement, and calculate your progress over time.

'Check in' to Social Networking 2.0

Decoding location-based social networks and what they mean for customers, brands, marketers and champions of privacy.

BY BHAVIN TURAKHIA



In 2010, a leading US-based food service retailer experimented with location-based platforms and services and witnessed a 33 percent increase in its footfalls, 40 percent surge in check-ins, and expansion of the company's fan and follower base by 60,00,000 (source: media and industry reports). Utilizing the power of location-based social networking, the experiment worked in both digital and real world capacities. However the most incredible statistic is that it took an investment of only US\$ 1,000 to garner such spectacular results.

So what does this example suggest? What's so special about location-based social networking that many claim it to be the next wave of marketing innovation and interaction with customers?

INDIA'S READINESS

A recent study by ViziSense states that social media usage has reached 60 per cent of the total online population in India. Innovations like location-based services will further enhance the consumer experience and allow people to share their location through email or text. It will enable people to virtually check in and find the latest new hotspots—restaurants, coffee shops, malls, or theatres—while keeping their community in the know.

Location-based social networking (LBSN) adds the component of location and keeps your peers in the know of your whereabouts. It connects nearby people and points of sale through geo-targeted media. Location-based social networks complement existing online tools such as your friends list on networking sites, your feed on Twitter, and your smartphone's GPS, and connect them with the offline world. As these applications gain more and more visibility in the market, companies and marketers stand to gain the most. There is scope to study consumer behavior, identify emerging

trends, and devise integrated and targeted offerings for various consumer groups. For example, in a country like India with more vehicles being added to the roads and traffic snarls already the order of the day, a location-based portal that provides users with check-ins and real time information on road traffic could prove to be very useful. Location-based third applications could enable users to better plan their travel and time!



Social and current: The Meter Jam campaign leveraged location to help stranded commuters.

Product development firms in India are already exploring the potential of location-based services on several platforms. Development of web and mobile applications for educational purposes could trigger a paradigm shift in how universities and educational institutions exchange information in real time. This could include various online tools like chat, email and other collaborative tools.

LBSN adoption could spawn an entire ecosystem of services and information, partnering and collaborating with various stakeholders in the entire chain to provide convenience and a wonderful user experience. Taking the same example, a location-based portal could be integrated

with third-party applications such as online urban lifestyle guides, local search engines, location based games and entertainment, to provide useful services to the user in real time while collaborating with various players in the ecosystem.

While location-based services have been tried and tested in various pockets of the country using the mobile phone, there is immense room for growth. India's mobile subscriber base has the potential to further trigger this growth. According to a report by Research and Markets, the total spends in the LBS market in India is expected to rise to US\$ 78.2 million in 2013.

For a country like India, while the mobile phone would emerge as the obvious choice to provide targeted offerings, a few rational concerns need to be addressed. Sharing more information online in real-time regarding your whereabouts predisposes one to a certain amount of risk. Also, while India has an envious mobile population, only a small proportion of these own smartphones that enable such applications to work. In order to realize their true potential, location based services need to be brought into the ambit of the common man, or the penetration of smartphones needs to increase. While the latter is a difficult order to achieve, the former is possible with innovative products being tweaked and developed for the local market.

Despite all this, marketers are now executing campaigns with full faith in the adoption of LBSN. Consumers are moving from their real lives to their virtual lives, by taking social activism online (like the famous Meter Jam campaign), or creating a space where coffee is just a click away. LBSNs will make their way into our daily lives—welcome to social networking 2.0!

Bhavin Turakhia is founder, CEO and chairman of global web products company Directi 

GPS: The Way Forward

Stopping to ask for directions could soon be a thing of the past. You will always be able to easily find your way using GPS in almost in any part of the country or, for that matter, the world.

BY PRIYANKA TILVE

GPS or Global Positioning System is a very simple technology that reveals your location after coordinating with satellites that orbit around the Earth and relay the information back to you. All you need is a device with a GPS chip, and finding one shouldn't be hard. These days, almost every smartphone and tablet is equipped with GPS. You can even buy a dedicated GPS navigator. All you have to do is key in your destination and then follow turn-by-turn voice and visual directions to get there.

We spoke with Rohan Verma, Director, MapmyIndia, the pioneers in digital map data and consumer navigation services, to understand what drives the GPS revolution.

Q How and when did GPS technology make the transition from enterprise application to the consumer space?

A GPS as a technology at the enterprise space came to India in around 2005-2006. When it first came to India, GPS was being used by the enterprise for fleet management. So GPS devices were hidden in trucks and commercial vehicles or taxis so one could remotely see and track where that

vehicle is. Around the same time, a few mobile phones started to come with GPS chips built-in. People had just begun to understand uses of GPS for consumers and the benefits that could come from it. It could basically tell you where you are right now, places nearby, and how to reach your destination. So it could provide the basic features of a map with direction and turn-by-turn navigation. In 2007, we launched an all-India GPS navigator for cars and that really kick-started the GPS trend among the consumers.

Q How did you go about mapping, considering India is such a vast country? How accurate are they and how do you keep them updated?

A We have deployed over 400 field surveyors since 1995 who have been walking and driving millions of road kilometers, equipped with sophisticated data capture equipment, to collect multiple attributes of roads and places across the country. This information is then processed and compiled by over 200 map specialist engineers, resulting in India's most detailed, accurate, comprehensive and updated digital map.

We continuously collect new data

and release map updates every 4-6 months. Our millions of Internet, in-car, mobile and enterprise users continuously provide feedback as well, which helps focus our efforts on things that need to be updated.

Q In what ways can GPS-enabled devices like smartphones, tablets, notebooks, etc. help us make our day-to-day lives more efficient?

A Let's say I decide to go on a holiday to Kerala and stay at a resort, which is about hundred kilometers from Trivandrum. I would be landing at Trivandrum airport, and from there, I would be taking a taxi to the resort. The taxi will charge by kilometers travelled, and since I don't know the area well, the taxi driver could take me to my destination via a longer route and run up the meter in the process. That could cost me Rs 400-500 extra. However, with my GPS navigator, I know where my resort is and I can see if the driver is following the recommended, shortest, and fastest route.

Similarly, if the cab runs out of petrol on the way in the middle of nowhere, I can easily find the nearest petrol pump or find a mechanic or service center. Additionally, when I am at the resort, I may want to go sightseeing or find a nice restaurant. Thanks to my navigator, I will have access to all that information. And of course, if I get lost, I can easily find my way back.

Q Did you face any challenges when promoting the GPS service in India?

A We faced a couple of challenges. Firstly, India doesn't have a map



“We envisage GPS being pervasive in multiple devices, be it in your mobile phones, tablets, or in your car, as a portable device or as a built in system.”

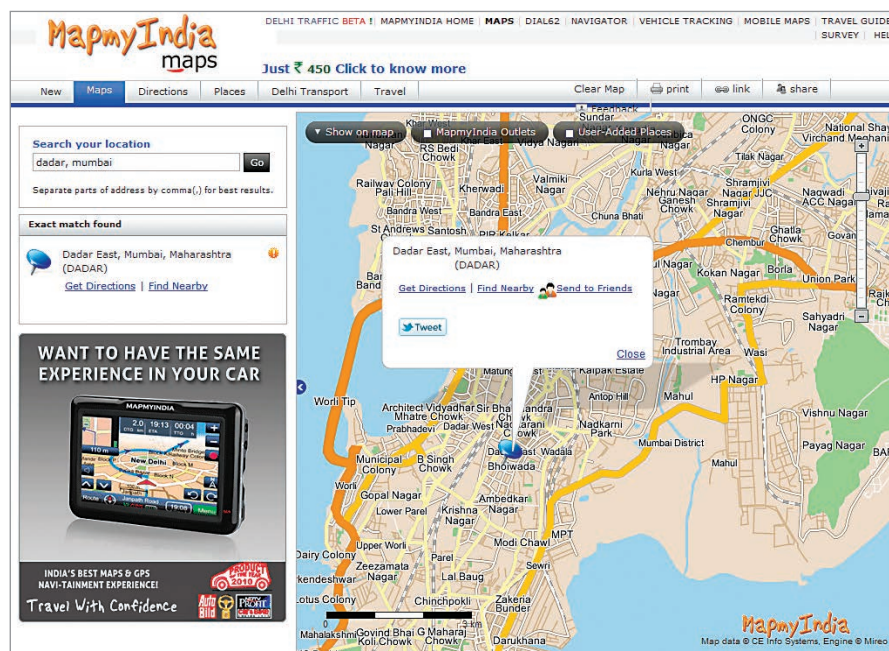
Rohan Verma,
Director, MapmyIndia

reading culture and one of the reasons for that could be that the cities were not that well planned and we didn't have maps before, so it's a mindset barrier. Secondly, you will have a good experience with GPS only if the map is of good quality and accuracy. To me, that has been a bigger barrier, since many of the maps that are present in India today, especially the free ones, are not of the best quality. They are good, but if you ask people to trust those maps blindly to guide them to a destination, they will hesitate. It's similar to asking somebody on the street; sometimes it may be right and sometimes wrong. If people do not have a good experience with the GPS service, it could act as a barrier in adoption. Having said that, as market leaders, we have seen many people using, enjoying and recommending the service. We know for sure that this market is exploding right now and it's just a matter of changing the mindset of the people about whether this technology will really work in India.

Q Do you think GPS tracking devices that reveal your location can have adverse effects on personal security?

A Just because you have a GPS device or GPS on your phone, it does not mean others can track you. Your GPS is meant to just tell you your exact location. Depending upon the kind of application, it may make your information public. If you have an application that by default keeps your information private, then only when you explicitly allow somebody to see your location, will it share your location with them. There are applications, which by default may display your location information to others, and if your application is sharing your information without taking your consent, it's not safe.

Ultimately, it's the responsibility of the individual using the application to firstly tune the privacy settings according to his requirement. Some people are very social and open, but some people are not, so they should control the application based their level of comfort. At the same time, I believe that application developers should carry the responsibility of safeguarding the interests of the users and not giving out information without their consent.



In 2007, MapMyIndia launched an all-India GPS navigator for cars, which helped kick-start the GPS trend among the consumers in India.

Q What will give further impetus to GPS services in India?

A There are many things that I think will help increase the mass appeal of GPS. When it comes to GPS navigation, voice guidance available in local languages will definitely help appeal to a broader audience, because India is not just a English or Hindi-speaking country; it's a multi-lingual. So voice guidance in local languages will reach out and help people connect to this technology better. We currently offer GPS navigation services in eight different languages.

Something new that we have introduced is house numbers into the map. So now you don't have just roads, localities and important places, but even house numbers. Even though you live in the same city, you may not know all the places and it's easy to get to a particular road, but it's not always easy to find houses. You may have to look around a little bit and possibly even ask somebody. In case of traffic, you may have to go around in circles and waste time, but with a GPS navigator, if you want to reach to somebody's house, you can just type it in and get there.

The third thing that we think will be useful would be to get more 3D buildings in the maps. This means as you follow the guidance of your GPS, it will start

showing the buildings around you in 3D, which makes it easier for you to see and relate to it. So that's the technology that we think will definitely be useful in the future.

Q What future trends do you anticipate in GPS technology in the consumer space?

A We envisage GPS being pervasive in multiple devices, be it your phones, tablets, or car, as a portable device or as a built in system. Applications built on top of that will help you use GPS in very interesting, useful and safe ways. Just like cameras and music have become a regular part of our lives, you will see GPS becoming a regular part of our lives so we become location-aware and get location-based information wherever we go.

We see real-time traffic information definitely helping consumers. We are running a beta service in Delhi, where you can see live traffic situations in and around different parts of Delhi along different roads. We see commercialization of this technology helping consumers find more uses for GPS. Another feature is social recommendations; ratings or reviews of places nearby, check-in services, deals and offers, etc. These would also help in creating more adoption of GPS.

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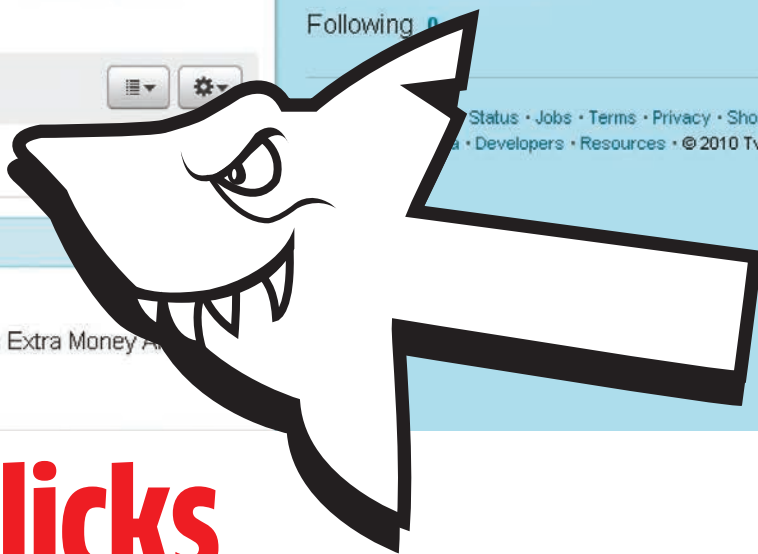
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Dangerous Clicks

Be careful of mouse click traps! A flood of new scams are tricking users into revealing personal information and infecting their PCs. We show you how you can protect yourself.

BY MANUEL SCHREIBER

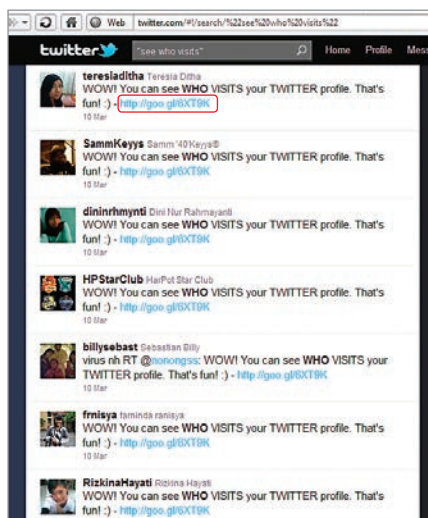
These days, most people know better than to click on clearly forged PayPal messages or open suspicious mail attachments from unknown senders. Scammers are now creating more sophisticated traps to lure users. Phishing sites use short URLs to hide, deceptive security certificates infect your computer, and so-called optional functions endanger the operating system. We show you where the traps lie, how you can protect yourself from them, and how you can undo simple mistakes.

1 Hiding Behind Short URLs

One of the most frequent ways that criminals now use to spread malware is by using shortened URLs. People carelessly click on these shortened links (which look like bit.ly/abcde), whose random characters conceal the actual domain. These are commonly found on social networks such as Facebook and Twitter, but are easy to use anywhere. The dangerous ones are often disguised as bargain recommendations, game

invitations or proof of unbelievable celebrity gossip, on any kind of site.

SOLUTION: The same rule for email attachments applies if you receive messages from unknown people: do not open them! However, friends and



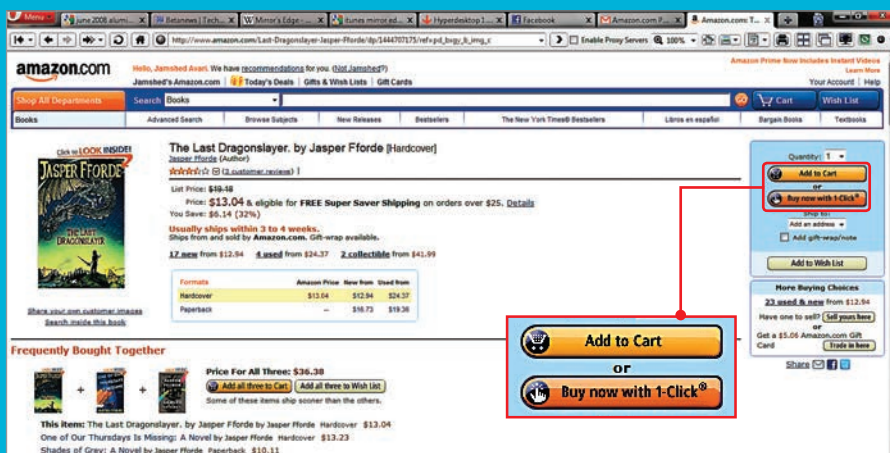
A simple search on Twitter shows how many accounts have been compromised by this scam.

relatives could unknowingly pass on dangerous links. On social networks, accounts are routinely compromised, and thus, even more spam is circulated. You can secure yourself with the Firefox extension 'Long URL Please', which automatically displays the original address as soon as you hover with the mouse over a short URL. If you use a browser which does not offer a similar add-on, you can use the online service longurl.org.

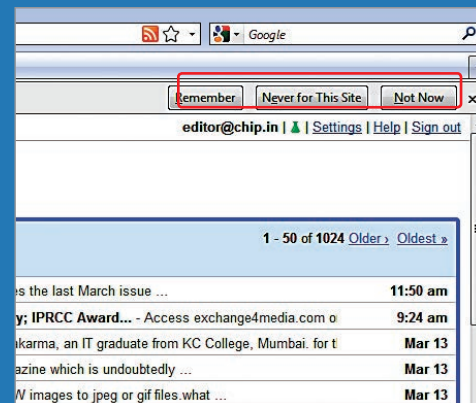
2 Security Risk Certificate

As a rule, sensible sites, which require you to log in are protected using SSL and therefore own a corresponding certificate. The user does not need to intervene because useful certificates are saved by the browser and are accepted automatically. You should be skeptical if a website instructs you to create a security exception for it. This would result in you classifying a dangerous site as trustworthy.

SOLUTION: Before you confirm a



Click carefully! The one-click purchase option is easy to mistake for the more familiar 'Add to cart' button.



Browsers will routinely ask whether you want them to save your passwords. Use this feature with caution.

certificate and add a security exemption rule, check whether the domain is genuine, because you are might soon be the victim of a phishing attempt. However, it could also be that the latest certificate has not been saved by the browser. Test the address with another browser. Try an alternative site if one you don't know well requests an exception. If you have confirmed a certificate by mistake, then you should delete it. In Firefox, you will find the option using 'Tools | Options | Advanced | Certificates | View certificates'. Check the tabs labeled 'People', 'Servers' and 'Others' – unless you have approved some, there should not be any certificates listed here.

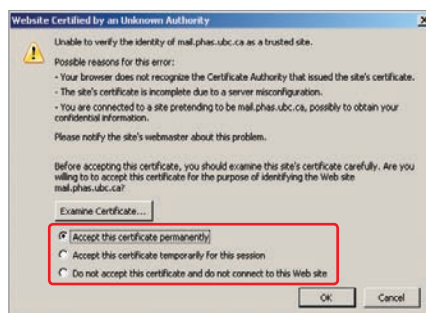
3 Unintentional Web Purchases

Online shops like Amazon let you quickly put products in a shopping cart so you can pay for them all later. You might think you can click on things and then decide whether to complete the purchase later, but it can happen that you press the "1-click" button which is very similar in appearance. This isn't a scam, but it could cost you some money if you aren't very careful.

SOLUTION: Depending on the website, you will have to check what the policy is for cancelling a transaction.

4 Subscription Traps via Registration

You find some freeware or an unbelievable offer online, and suddenly start receiving huge bills via email. Dubious online services try to trick users into signing contracts for expensive monthly subscriptions, using numerous tricks including deceptive advertisements and bogus "agreements" that people never read. The sites make use of weak laws and loopholes. Those who do not



Security certificate popups might be annoying, but that's no reason to automatically accept anything.

pay up begin receiving threatening mails. **SOLUTION:** Report sites which ask for your data with so-called free of cost offers. If you are trapped in a subscription scam, stay calm and do not pay until you are sure there was a legal and binding contract. Keep yourself safe from such websites by using an Internet security suite with suitable realtime protection

Access	Personal data
8 EUR per month By registering you incur a cost of € 96.00 incl VAT per year (12 months of 8 €), Contract Period 2 years for a total cost of € 192.00.	Title: First name Last Name
Advantages as a member As a registered user to opendownload.de gives you access to 1,000 editorially prepared contents on software. We regularly work out references to new programs.	Contact details Street Address Postcode Location Country
Content In the members area gives you access to 1,000 editorially prepared contents on software. We regularly work out references to new programs.	other information Date of Birth E-mail Address
Software categories: - Security	Pressing the button "Register" you may incur a cost of € 96.00 incl VAT per year (12 months of 8 €), Contract Period 2 years for a total cost of € 192.00. ☐ I accept the Terms and the Privacy Statement and have the revocation took note. Anmelden

This website clearly states that users will be charged an annual service fee, but there's no reason to pay.

features, or through free services such as www.mywot.com, which also offers a Firefox add-on.

5 Checking Passwords

Browsers let you simplify your life by saving passwords for your frequently used sites, so you don't have to worry about remembering them. This makes things easier, but also less safe. Trojans like Zeus and its many variants are specifically tuned to detect saved passwords in your browsers. New versions of these Trojans go so far as to automatically hide the 'Save' query and intercept your confidential passwords directly.

SOLUTION: If you have saved any passwords in the browser, you should remove them to be safe. In Firefox, delete it under 'Tools | Options | Security | Saved passwords'. In Internet Explorer,

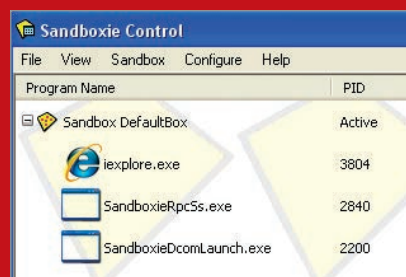
Tips For Quick Clicking

Take these simple precautions instead of searching for solutions after the damage is done.

CREATE BACKUPS WITH BUILT-IN TOOLS

Windows 7 offers functional security tools. However, these features are well hidden and not very intuitive to operate. Here's how to secure yourself: Click 'Control Panel | System and Security | Backup and Restore' and select the option 'Create a system image' in the sidebar. You must choose a specific target in the next window, for example an external hard disk. Subsequently, you can burn a Windows backup CD automatically. Windows also offers the necessary tools if you want to save your personal data regularly: Click 'Backup and restore' in the Control Panel and follow the on-screen assistant. We recommend purchasing a commercial backup tool or security suite if you are using Windows XP.

TEST IN A SANDBOX



If you want to install programs occasionally, but aren't sure of their origins, you should not risk damaging Windows. With the simple tool Sandboxie (www.sandboxie.com), you test software in an environment isolated from the system and protect yourself effectively from software junk and viruses. After installing the program, you can open files in this secured environment by right-clicking and selecting the "Start in sandbox" option.

TEST LINKS FOR VIRUSES

A good antivirus program is mandatory on every PC. Keep your system even more healthy with the Firefox extension Dr Web Antivirus Link Checker. This add-on works completely in cloud, so it won't consume any additional resources on your PC. After the installation, a new option appears when you right-click any download. You can have any link analyzed by the Dr Web database, and a pop up window will then tell you whether the file is safe for downloading or not.

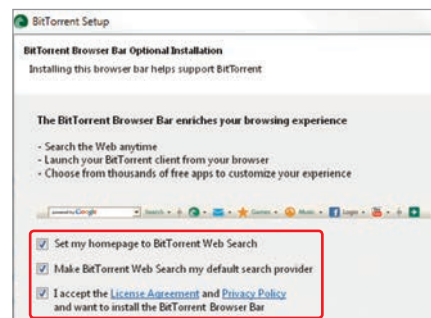
you will find the option under 'Tools | Internet options | General' and then clicking 'Delete' under 'Browser history'. You should install the third-party application KeePass (www.keepass.info) if you still need a password manager.

6 Junk Add-ons When Installing Software

In many cases, a single click confirming you want to install some new software leads to a series of problems. Unsaved documents can be lost if other programs are left open while installing new software. New shortcuts pop up everywhere, including your desktop, and junk software starts running automatically. New toolbars clutter up your browser, your home page changes, and several settings are modified without your consent.

SOLUTION: You should use the automatic save function to protect open documents. In Office 2010, you will find the settings under 'File | Options | Save', and in Office 2003, under "Tools | Options | Save". Select a value of two minutes and select the checkbox for 'Save autorecover information'.

If a program starts itself or any component automatically after being installed, you get rid of it with CCleaner (www.piriform.com/ccleaner) using "Tools | Autorun". Toolbars are stubborn because you cannot usually uninstall them in the browser itself. You will have to remove the junk manually, though the free Multi Toolbar Remover (<http://autoclean.computersitter.com/>)



Lots of free programs make money by offering bundles that slow down or infect your PC.

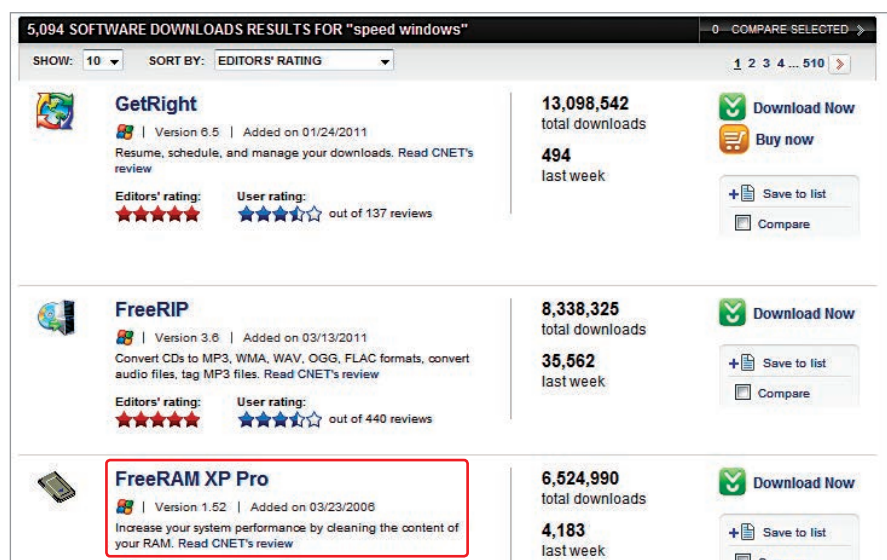
downloads) will help. Simply start the program and select the toolbar you wish to get rid of.

7 PC Crashes After Running a "cleanup" Program

The ability to clean Windows with just a mouse click sounds enticing. However, such automatic cleaning functions can endanger the system because they delete what they consider unnecessary without confirming things with the user. In the worst case, your PC might not boot up any more because critical registry information is suddenly missing.

SOLUTION: You should create a registry backup before any such operation if you still want to try using such tools. This can be done quickly with the built in tool Regedit.exe, which you can call up in XP using 'Start | Run...' or simply enter in the search field in Vista or Windows 7. Click 'File | Export' in Regedit. A doubleclick on the backed up file is enough to restore the registry. 📄

- feedback@chip.in



Performance tuning tools are a dime a dozen, so make sure you're not getting scammed.

Blogs: The Long and Short of It

The once popular form of self expression on the Internet, blogging today seems to be threatened by the onslaught of social networking sites. Can the two coexist?

BY PRIYANKA TILVE

Before social networking sites, blogging was the only platform that allowed people to create their profiles online, express their views, interact, air their grievances, share pictures; in short, maintain an online diary. Platforms like Wordpress, Blogger and LiveJournal became extremely popular. There was no word limit and you could rant as much as you wanted about any topic under the sun. While many maintained a blog just for the pure love of writing, others turned it into a revenue generating platform. However, with the ever increasing popularity of social networking sites like Facebook and Twitter, there are reports that claim blogging will soon become a thing of the past. Is this true?

Blogging vs Social Networking

There are many reasons why social networking sites became popular. It allowed people to express themselves freely and almost instantly. Airing your views within 420 characters on Facebook or with Twitter's 140 characters came easy to many, instead of sitting down to write a dedicated blog. Having said that, there are many who still enjoy blogging, and the process of ideating, letting the words flow, and presenting their thoughts in an environment that is their own.

Take the case of Aditya Rao, a veteran blogger, who has been blogging for over six years and has about three blogs. He says, "My blogs have gone through many phases, starting with the silly college blogs on Rediff.com and

Blogger.com. While it's true that a lot of my networking and small updates have gone on to Twitter, blogging remains a personal favorite because of its mix of photos, video and text and also because I can get much more creative in my blog. Blogs, especially the Wordpress platform, are very flexible these days and a blog can be customized by a non-coder like me to look like a website proper website."

Rao says blogging provides him with a platform for thought, leadership and personal branding. So does he feel that there has been a decrease in the number of bloggers? "No. Internet users have increased, so bloggers have also increased. However, five years ago, everyone on the Internet was a blogger, but with the Internet spreading to the masses, even though the number of bloggers has increased, the percentage has gone down." On the other hand, Sidin Sunny Vadukut, an active blogger since 2002, feels that the number of bloggers has gone down. "I do sense a drop, at least in the number of serious, regular bloggers. I am not going to say that is a good or bad thing. These social networks allow a lot of people to communicate and publish without having to use the medium of blogs, especially if the idea was to communicate short messages, form interest groups, etc. However, India, in my opinion, has always had a shortage of good, well written blogs. While we have lots of personal blogs, specialized ones are very rare. I don't think the situation has changed much."

Anoop Johnson, Director-Marketing and Strategic partnerships at IndiBlogger, which is the largest community of Indian bloggers, feels that even though the number of bloggers has gone down, the quality has definitely improved. "Back in 2007-2008, we used to approve around 500 blogs every month, and reject around 700. Blogs are mainly rejected because they had duplicate content or did not have enough posts because the



Sachin Pandit

author ran out of things to say. In 2010, we approved roughly 600 blogs per month, while the number of spammy blogs came down to 500 per month. In other words, serious writers still continue to grow in number, while the half-baked attempts at blogging decrease since those authors have other outlets like Facebook and Twitter. Blogging requires much more discipline and passion than maintaining a social network profile, and there really is no comparison between the two."

Blogging With a Social Twist

Marrying your blog with a social network seems to be the current trend, especially exploited by those who use their blog to generate revenue. And they seem to be starting young. All of 14 years-old, Vishal Sanjay from Ryan International School, Bangalore effectively employed the social networks to his advantage to generate traffic for his blog. He blogs about social media, Internet marketing and business and is generating a sizeable revenue. He says, "Our main source of traffic remains social media sites such as Digg, StumbleUpon, Reddit, Facebook and Twitter. Every new post goes viral on these networks and we also have a practice of exchanging social media votes to get our articles viral. We have managed to garner great response and have over ten thousand visitors every month. Also,

Current blogging trends, as witnessed on IndiBlogger



A 17% increase in women bloggers from 2009 to 2010.

Technology bloggers doubled between 2008 and 2009. In 2010, number of tech bloggers signing up remained the same as in 2009, meaning that more blogs are emerging in non-tech fields.

2010 saw a 21% increase in bloggers registering their own domain names as opposed to using free URLs. Bloggers are turning professional.

Between 2008 and 2010, IndiBlogger. in witnessed a 43% growth in the number of new bloggers.

2010 saw a 4% increase in bloggers aged between 13 and 18.

Blogging in non-metro cities (Kolkata, Chandigarh, Lucknow, Coimbatore etc.) has increased by 14% in 2010.

fellow bloggers often comment or link some of our posts, which also works in our favor."

Similarly Deepak Raj, who is relatively new to blogging, having started in 2008, is an avid blogger having published more than 1,000 articles on his blog BikeAdvice.in. The 23 year-old claims that he has never had a 9-5 job and makes money mostly from his blog. Even though he gets a majority of traffic from search engines, he feels that the traffic from social networks is of better quality. He says, "Facebook and Twitter should be looked upon as companions to your blog rather than a competing site. Before social networks got popular, the only source of traffic to the blogs was the search engines. Google and other search engines help people to find relevant content, but they do not help a blog article go viral. With Facebook and Twitter, it is very easy to rapidly spread good quality content. All it takes is a single click on the Facebook 'like' button on a blog post and all his friends are instantly notified about the content that he or she likes."

Even regular bloggers, who are not concerned with traffic and revenue, look at social networks as a medium to attract people to their blog. Like Sidin Sunny Vadukut puts it, "On an average, I blog once a month and then I Tweet or Facebook out my links. Sometimes I get interesting feedback and often meet people with similar views or ideas, which is fun. I know there are other bloggers who have closely married their blogging and social networking together. I am nowhere near that sophisticated. If anything, Twitter and Facebook come in the way of my sitting down, focusing and writing."

So is Blogging on the Wane?

Blogging is definitely not dead. Recently, Wordpress launched a series of challenges, like 'Post a Day' and 'Post a Week'. This was viewed as a move to give blogging a shot in the arm, and looking at the overwhelming response, it seems to have worked. We have also seen blogging evolving in its new avatar, as a part of the whole social media movement. Leading brands have their blogs that are professionally managed and aimed at presenting the readers with the humane side of the corporate world. ☐

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Just Another WordPress Weblog

Tip for a new year of blogging Theme Updates for Custom Menus and More

Posted: Thursday, December 30th, 2010 at 10:40 pm. Filed in WordPress.com.

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Challenge for 2011: Want to blog more often?

by Scott Berkun

There is a saying among writers: to write more, write more. The hardest part of blogging isn't the tools – it's what goes on between your ears. Many people start blogs with excitement, but lose courage when facing the blank post page, or chicken out before hitting publish. Here at WordPress.com, we know. And we're here to help.

Announcing DailyPost.WordPress.com
Starting today, you can go to dailypost.wordpress.com for inspiration, encouragement and advice about blogging. We'll be **posting every day** so you can get regular boosts of motivation to blog more often.

The Post Every Day challenge
Daily habits are the best way to make change happen. If you can remember to do something every day, by the end of the year, you'll have done that thing over 300 times! Simple and amazing.

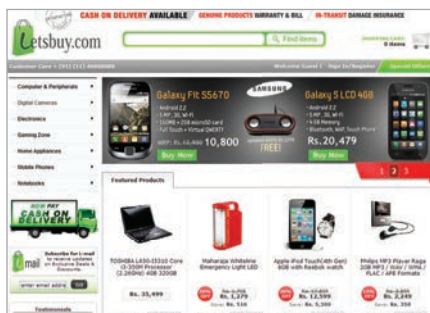
As part of the DailyPost, we're launching two campaigns:

- **Post a Day 2011:** Post something to your blog every single day through 2011

Wordpress's recently launched series of challenges have received an overwhelming response.

Web Watch

Here are some interesting websites you might want to visit.
COMPILED BY PRIYANKA TILVE



ONLINE GADGET SHOPPING

One of the most popular amongst the ever increasing number of Indian e-commerce sites is LetsBuy.com, a website that is dedicated to gadgets and digital lifestyle products. Launched in 2009, it has steadily emerged as one of India's fastest growing e-commerce site specializing in consumer electronics from leading brands. The site offers over 5,000 brands such as HP, Microsoft, Sony, HTC, HCL, Acer, Canon, Nikon, Panasonic, etc. Products cover a wide range, including computer peripherals, accessories, hard drives, monitors, printers, digital cameras, DVD players, media players, GPS navigators, TVs, home appliances, mobile phones, and notebooks. It also sells gaming software, hardware and accessories.

What makes the site better than the rest is the pre-order tie-ups with leading brands. It held a pre-order promotion for the Sony Ericsson Xperia Arc and Neo and recently it offered HTC Merge for pre-order. You can pre-order products after depositing Rs 1,000 as the advance booking amount.

The site also has amazing deals to pick from and offers the products at a discounted rate as they deal directly with the manufactures or the leading distributors. Additionally, they offer the branded products with manufacturer's warranty. And since they stock products in their own warehouses, you don't have to wait for long to get your product. What's more, they offer free home delivery across India.



INDIAN LINKEDIN WITH TWIST

Almost everybody is aware of LinkedIn, which is possibly the biggest professional networking site in the world. But close on its heels is Indian site ApnaCircle, which was launched in 2006 with an aim to cater to professionals' social as well as career requirements.

It helps professionals find the right job and it also helps employers to find the right candidates. Since its inception, ApnaCircle has grown rapidly. In 2009, it merged with Viadeo and Tianji, leading networking sites in Europe and China respectively, which helped it expand its network. Later, it also acquired a Canadian networking site, giving it a further boost. These mergers mean that Indian users can interact and network with others around the world.

The site is a great medium for users to widen their circle of contacts and provide them with great exposure within the industry. Here, you can also micro-blog and participate in the Q&A sessions with experts. Users can upload their resumes, create their profiles, update their address books, and even create their business cards.

A unique feature of this site is that you earn points by being active i.e. updating status, answering questions, commenting on articles, etc. You can redeem these points for free products such as digital cameras, pen drives, etc. The site is also a great source of information and has details on local MBA colleges, institutes, etc.



SOCIAL NETWORKING FOR KIDS

A major concern for parents these days is the risks their kids face from regular access to social networking sites. While social networking sites officially require users to be at least 13 years-old to sign up, it's very easy for younger kids to create accounts. This is a matter of grave concern for parents, as their children may be exposed to inappropriate content.

Togetherville.com is a social networking site for kids aged 10 and younger founded by Mandeep Singh Dhillon. There are reports that the site was recently acquired by Disney. It works similar to any other social networking site, but it's age-appropriate and parent-monitored. Parents can use their Facebook logins to create accounts for their children on Togetherville. Once the account is verified, you can go about creating a profile for your child.

Next, you can create a neighborhood by inviting family and friends to create accounts for their kids. Here, kids can create their profiles, upload pictures, play games, watch videos, create artwork, send gifts, update status, comment, etc. just as in other social networking sites. Parents can easily keep a tab on their child's activities in Togetherville and it also provides them with a weekly update on their activities. Since the account is under parental control, there is no fear of anonymous people interacting with your child. Also, your activities on Togetherville will not be displayed on your Facebook profile.

JAPAN IS STILL TRYING TO COME TO TERMS WITH THE DEVASTATING EARTHQUAKE AND TSUNAMI.

PRIYANKA TILVE,
SENIOR FEATURES WRITER



HELP AT A CLICK



COMICS IN YOUR INBOX

Calvin and Hobbes, Garfield, Dilbert, Pickles, and Peanuts are just a few of the most popular comic strips. They have been around for ages, but never fail to entertain us with their simple yet witty observations. If you want your daily dose of comic strips to brighten up your day, you can subscribe to GoComics.com.

GoComics is an online comic portal from Universal Uclick that features some of the most popular comic strips and cartoons from around the world. It's also the largest catalog of syndicated newspaper strips and webcomics. Once you subscribe to the site, your favorite comics will be delivered to your inbox on a daily basis. However, with a free account, you will receive only one comic strip via email.

You can also visit the site to check out the editorials and features of offer, and even save comics in your collection. If you get yourself a paid Genius account, you will have unlimited access to the site, allowing you to save as many comics as you like and get unlimited number of comics emailed to your account.

Furthermore, GoComics is also home to Comics Sherpa, which is a site for aspiring cartoonists. Here, they can showcase their work and receive feedback from others in the community. The site also has an online store from where you can buy customized t-shirts, mugs, keychains, etc. featuring your favorite comic characters.

On March 11, the northeastern coast of Japan experienced heavy tremors caused by a massive 9.0-magnitude earthquake. The people of Japan, who are somewhat used to earthquakes, took the necessary steps to secure themselves; something they've been rigorously trained for from a young age. But there was something about this one; it was stronger than any they had experienced before and within minutes, they witnessed giant tsunami waves heading their way. What ensued was sheer destruction as the waves surged into towns, swallowing everything on its way.

Villages were swept away, thousands lost their lives and went missing, while several thousands were rendered homeless as Japan reeled under nature's fury. In the wake of tsunami came the heart wrenching stories of hope and despair. And with the threat of a nuclear meltdown looming large over Japan, the world has come together to help the nation that has nearly come to a standstill.

While many countries have come forward to offer aid and assistance, we as individuals can do our bit as well. GlobalGiving.org, an international organization that raises funds for several causes, has launched a Japan Earthquake and Tsunami Relief Fund. Your donation will be directed to their partners working on the ground in Japan. The donors will receive an email update on how

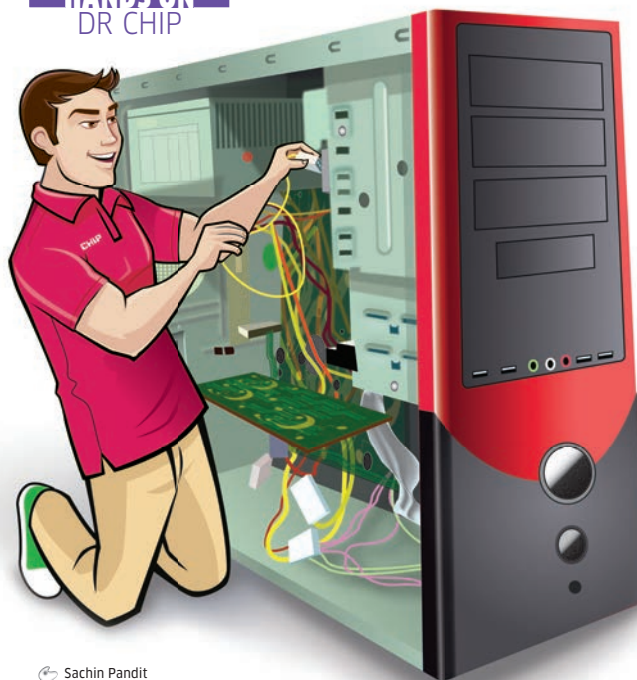
their funds were utilized. Their aim is to raise \$2 million and have so far been successful in raising more than \$1.3 million.

Savethechildren.org, which is a leading independent organization working towards creating a lasting change in the lives of the children in need around the world, has set up a Japan Earthquake Tsunami Children in Emergency Fund. They have carried out an exploratory mission in the hard-hit regions of Japan to rescue children. They have also set up a center for displaced children in a protective environment.

Salvationarmyusa.org is one of the oldest charitable organizations and operates in over hundred countries around the world. It has set up a Japan Earthquake and Tsunami Relief fund to which you can donate online. The Salvation Army has currently set up three emergency service teams, who are working in areas affected by the earthquake and tsunami. They even have one team helping with the evacuation process in the areas threatened by nuclear radiation.

As frivolous as it may seem, you can even donate by buying virtual goods on FarmVille, CityVille, FrontierVille, etc. as Zynga has tied up with Save the Children. While on Facebook, you can even show your support by a simple 'Like'. Explore.org is donating \$1 for every 'Like' on the "Dog Bless You" page on Facebook. 🇨🇦

- priyanka.tilve@chip.in



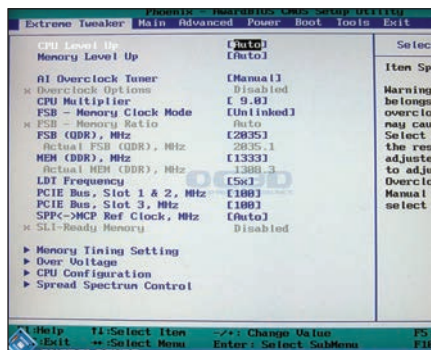
Sachin Pandit

Dr CHIP

SEND YOUR QUERIES TO: drchip@chip.in

[Q] Hello Dr CHIP. I have been a consistent reader of your column. I have a problem with my PC and I need some help from you. When my PC starts up, the message 'OC settings fail. Press F1 to continue' keeps displaying. I have Windows XP SP2 installed on the PC, which has a configuration of 512 MB DDR2 RAM, 80 GB HDD and a CD/DVD ROM. Please help me. Thanks in advance.

— Gautami Karkal



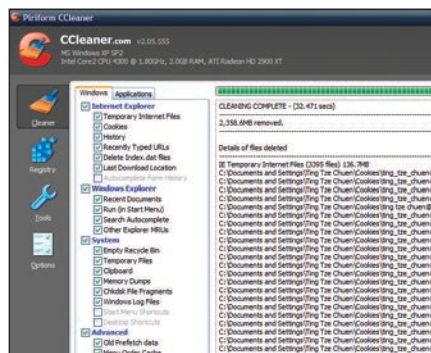
If the PC can't run on the specified overclocking settings, it will show an OC error or won't start up.

[A] Hello Gautami. You might have changed some settings relating to voltage or frequency of either the memory or processor in the motherboard's BIOS. The values that are presently set might not be compatible with your processor or memory, and hence the BIOS reports that it is unstable. OC means overclock, where the values of the processor or RAM voltage or frequencies are tweaked higher than its actual operating ratings to run faster than usual. Overclocking is done to gain higher speeds from a slower

computer, but if not done properly, it can damage your hardware components in the long run. I would suggest that you reset your BIOS to the default settings by entering the BIOS of your motherboard immediately after powering on your PC. Once this is done, you should not get any errors.

[Q] Hello Dr CHIP, I have heard that temporary files keep getting created in the computer as we use it, and they slow down the system to some extent. Is it true? Can you please explain how these files get created? How can I delete these files and make my system faster? Thanks in advance.

— Ansamol



Cleaning the system by deleting junk, cache, and cookies can increase the overall performance.

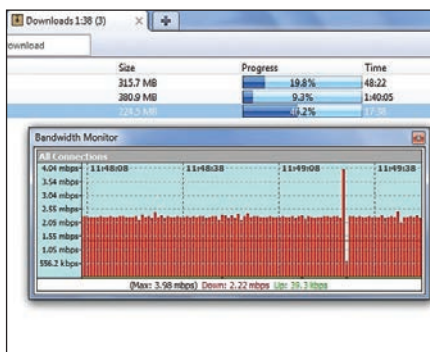
[A] Hello Ansamol. Every operating system and program that is installed on a computer creates temporary files for its working. These files are usually automatically deleted by the program, but often these files are still present on the system, causing a huge clutter of

unwanted files. Finally, these files cause a hard drive to get heavily fragmented, which in turn slows down the computer. It is difficult for a user to find and delete these files as they are never in one single location. They are usually scattered in temp and cache folders of each program. You can make use of disk cleaning software such as Windows Washer, CCleaner or Disk Scrub, which can help find and safely delete these files for you. You should use one of these utilities regularly (at least once a week) if you are using your computer every day. Once you clean out the temporary files, you should also run the disk defragmenting utility to defragment your hard drive and increase the performance of the system.

[Q] HI Dr CHIP. I am a regular reader of CHIP. There is a problem with my desktop PC. My Internet download speed is 60 KB/s while my friend gets a speed of 300 KB/s. We are both using same Internet broadband service from BSNL, which is an unlimited plan costing Rs 800 per month. My PC's configuration is Intel Core 2 Quad 2.66 GHz, Intel DG43NB motherboard, 2 x 2 GB Transcend 800 MHz RAM, and 500 GB of HDD, with Windows 7 installed on it. Please help me.

— Keshav Kant

[A] Hello Prince. There could be several reasons behind this. There could be a virus that is eating into your bandwidth. There could also be some software that is running in the background and utilizing



There is a difference between capital 'B' and lower case 'b' when reading Internet connection speeds.

the bandwidth without your knowledge. Also, there could be some software, antivirus or Windows itself automatically updating in the background. Secondly, you should also check what speeds you have subscribed to and if your friend has mistakenly told you his speed of 300 KB/s. If you both have subscribed to a speed of 300 Kb/s, then your download of 60 KB/s is perfectly fine. If he is reporting 300 KB/s, then he has subscribed to a 3 Mb/s connection and his speed will be 300 KB/s, which is correct. Check if his speed is 300 Kb/s or 300 KB/s (both are different). Note that the speed of bits and bytes are written in small 'b' and capital 'B' respectively. If you still find that there is some problem, you should report this to BSNL and ask for support.

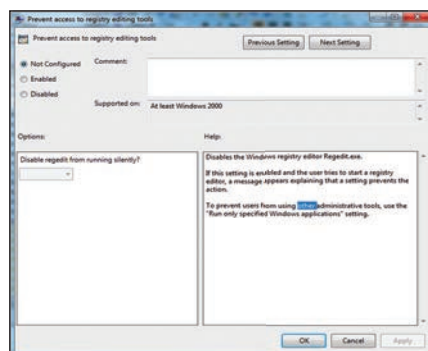
[Q] Hello Dr CHIP. I am presently using Windows XP and there are some problems that I am facing with it. I am getting an error 'Generic Host Win32 encountered a problem' in the midst of some programs. Also the registry has been blocked and I cannot edit the registry using the 'regedit' command. When I run the 'regedit.exe' utility, a message comes up stating 'The Registry editing has been disabled by Administrator'. I have also tried resetting the 'Winsock' using the 'netsh' command. Please help me in unblocking the registry editor. I hope for a positive response from CHIP.

— Ankit Garg

[A] Hello Ankit. The reason you are facing such errors is due to a Trojan, which has infected your operating system. You will need to install an antivirus, update it and scan/clean your entire hard drive. To enable registry

editing you can try this trick:

- ▶ Open the Group Policy Editor by typing 'gpedit.msc' in the 'Start | Run' dialog box.
- ▶ Scroll down to the 'User Configuration' in the Local Group Policy Editor window.
- ▶ Expand the 'Administrative Templates' in the following branch in the left pane.
- ▶ Click on 'System' under the 'Administrative Templates' branch.
- ▶ Search for 'Prevent access to the registry editing tools' in the right pane and double-click it.
- ▶ Now you should switch the status of the entry by clicking either 'Not Configured' or 'Disabled' using the radio buttons.
- ▶ Click on 'OK' and exit the Group Policy Editor Tool.
- ▶ Reboot and check if the registry editor works.



Switch the status of the entry by clicking 'Not Configured' or 'Disabled' using the radio buttons.

[Q] Hello CHIP. I am facing a strange problem with my DVD writer. When I boot my computer, the DVD writer icon is not displayed in the 'My Computer' window. At times when it is displayed, I can't access it. If I try to explore any CD/DVD, the computer hangs up or freezes. This also happens when writing a DVD. In short, the DVD writer is nearly useless but I need to use it quite often. I am using Windows 7 operating system and have 1 GB of RAM. Please help me out.

— Rajarshi Roy

[A] Hello Rajarshi. Either your DVD writer is faulty or the cables connecting the DVD writer to the motherboard need to be replaced. Try changing the cable to check if it works. There could also be a problem with your operating system. Use



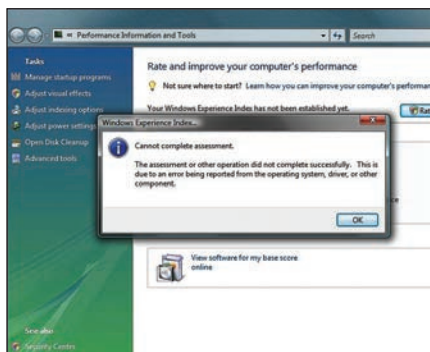
The IDE cables connecting the DVD writer to the motherboard should be checked for damage.

a Live Linux operating system such as Ubuntu or Knoppix to find out. Boot from the live CD/DVD and check if it works properly. If the drive works in Linux, then your Windows operating system needs to be repaired. If Windows is fun, your writer needs to be repaired or replaced. To be sure, you can also try using the writer on another computer to find out if the fault is in the writer, operating system, motherboard, or the cables.

[Q] Dear Dr CHIP. I am facing an issue with my PC. My 'Windows Experience Index' is not updating at all. I have tried searching for a solution online, but nothing has helped. I am using Windows Vista operating system, and I have now updated to Vista with Service Pack 2. Even after updating, my 'Windows Experience Index' remains 'Unrated'. I thought that updating the operating system and all other hardware/software updates will solve the problem. I have upgraded my Nvidia Geforce 8500 GT graphics drivers to the latest version, and now it is showing a new problem. New hardware was detected and the setup now cannot update the 'Windows Experience Index'. When I clicked on a button to update the score, it shows the following message "Cannot complete Assessment. The assessment or other operation did not complete successfully. This is due to an error being reported from the operating system, driver, or another component". I have even tried deleting the files from the location 'C:\WINDOWS\Performance\WinSAT\DataStore', but it has not helped. In an online forum, someone else had faced a similar issue. He suggested doing this (deleting the files in the DataStore

folder), which solved his problem, but it did not work for me. Defragging the registry and fixing errors in it was also done, but the problem still remains. I seek your kind attention and help to get this issue solved.

– Phantom



Windows cannot perform the Index because it can't assess a particular hardware, software or driver.

[A] Hello Phantom. The problem with getting an index for your system's performance can be either due to a hardware error or a driver mismatch. The reason Windows cannot perform the Index is because it cannot assess a particular hardware, software or driver and hence the error. In order to rectify the error, try the following.

- ▶ Scan and remove any viruses that could be interfering with the online indexing.
- ▶ Next, you need to update all drivers from the respective manufacturer's websites and update the operating system completely from Microsoft's online update tool.
- ▶ Now check if the Windows Experience Index works. If not, proceed further. Since you had deleted the files from the 'C:\Windows\Performance\Winsat\DataStore' folder, you need to generate new files.
- ▶ Click on 'Start | Run' and in the dialog box type 'CMD' and press 'Enter'.
- ▶ On the command prompt window, go to the same folder and type the command 'Winsat formal -v' and press 'Enter'. The Winsat program will run a few lines assessing the machine on the whole and a list will be seen on the screen. If there are any errors, they will be listed.
- ▶ To create a report of the list and find out which one gives the error, you can run the command again with a verbose switch and save it in a file. The command is 'Winsat formal -v >

index.txt'.

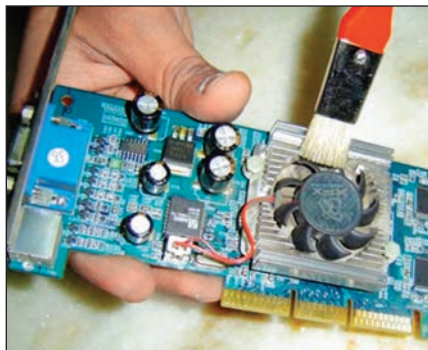
▶ The file will be generated with a complete assessment list of all the hardware and software errors and you can now pinpoint the faulty one. Once the list informs you about the erratic software or hardware, you can proceed with further fault finding and rectify the problem.

If the problem lies with a particular hardware or driver, you can unplug the hardware physically or disable the service/hardware from the 'Msconfig' and reboot. If the problem persists, temporarily replacing the hardware with another similar one might help. Now check if the Experience Index runs properly.

If all the components are fine and the problem still persists, you can either reformat the hard drive and installing Windows all over again or report the problem to your PC manufacturer.

[Q] Dear Sir, I bought an ASUS GTX 580 graphics card. Whenever I play a game, the graphics card gets extremely hot (within 10 to 15 minutes). But when the PC is in idle mode, the card runs cooler. When a game is running, the card gets so hot that it smells like something is burning inside the cabinet. My PC's configuration is Intel Core i5 760 2.80 GHz processor, ASUS P7p55d deluxe motherboard, A-Data 2 x 2 GB DDR3 1600 MHz RAM, Western Digital 1 TB hard drive, Cooler Master Silent Pro 700 Watt power supply, Cooler Master V6GT CPU cooler, Cooler Master Elite 430 Black computer case. I am quite concerned about the issue. Please help me.

– Pranjit Borkotoky



Remove dust from the cabinet and ensure that the graphics card fan is completely clean.

[A] Hello Pranjit. If there is a burning smell when the graphics card is running

at full load, either the graphics card is not getting enough cooling from the internal fan or the cabinet's cooling fan, or the graphics card itself is faulty. Make sure that you have a dust-free cabinet. Clean the cabinet using a good blower and ensure that the graphics card fan is completely clean. Also make sure that the case ventilation fans are working and the cabinet is not placed in an area that has insufficient air-flow around it. If the burning smell continues, you might want to have the card inspected by the dealer.

[Q] Dear Dr CHIP. Is there a way to view TV channels from the DTH set-top box directly on the PC? If yes, what are the requirements and are there any cables that need to be attached to the ports of the PC and connected to the STB?

– Durga Kishore



Regular set top boxes do not feature a D-Sub in/out port where you can route a computer via the STB.

[A] Hi Durga. The Dish TV set-top box is nothing but a bypass between your computer and monitor. You need to connect the computer VGA out to the Dish TV STB and the monitor will be connected to the STB. Now you can watch TV on your computer monitor even if your computer is off. You cannot record anything though. The unit works just like a TV tuner box, which converts your VGA monitor into a TV unit because a monitor cannot accept composite video signals. The set-top box converts these composite signals into VGA, which the monitor can use. If you have a set-top box for your TV already, it makes no sense buying this set-top box as you can do the same by implementing any external TV tuner box and attaching the composite video out from any DTH or CAS set-top box to the TV tuner box. These signals will be converted to VGA and you can watch it on your monitor.

[Q] Hi Dr CHIP. I had bought an HP Compaq Presario CQ62 desktop around four months ago. Its configuration is AMD 2 GHz Quad Core processor, 3 GB DDR3 RAM, 320 GB hard drive, and 1 GB ATI Radeon graphics card. About a week ago, I was surfing the Web and I had enabled Windows Automatic Updates, which was running in the background. All of a sudden, my laptop restarted and later it went to a BSOD. The error code is: 'IRQL_LESS_OR_NOT_EQUAL_TO_ZERO'. I tried restarting the PC using Safe Mode, Safe Mode with Networking, and Safe Mode with Command Prompt, but none of them worked. Finally, I had to format it completely. It has been working fine since then, but I would like to know what might have caused the problem, whether it will occur again, and whether there is any fault with my computer hardware.

— Suraj Pillai

[A] Hello Suraj. The only reason I can think of for your issue is a possible viral attack when surfing the Internet. As your PC is four months old, it could be possible that bundled/installed antivirus might have expired. PC manufacturers generally bundle an antivirus with the PC for free, but they are usually either valid for three months or a trial version. Hence, your antivirus might not have

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*** STOP: 0x00000019 (0x00000000,0xC000000F,0xFFFFFDD
BAD_POOL_HEADER

CPUID: GenuineIntel 5.2.c irql:1f SYSUSER 0x00000565

Dll Base DateStmp Name
00100000 3202c97e ntoskrnl.exe
00000000 31e406b5 atapi.sys
002c6000 31e406bf aic79xx.sys
002d1000 31e40674 CLAS2.SYS
fc698000 31e40673 Floppy.SYS
fc9a0000 31e40677 Fs_Kernel.SYS
fc9b0000 31e4060b KSecDD.SYS
fc6d8000 31e40679 10042pt.sys
fc974000 31e40674 Abdlas.sys
fcffa000 31e40662 nva_nll.sys
fc708000 31e4066b Hcfc.SYS
fcfb0000 31e40662 NDIS.SYS
fcfa4000 31f91a51 nva_dll
fc800000 31e40666 TDI.SYS
fcacf000 31f13847 tcpip.sys
fc550000 31601a30 e159c.sys
fc710000 31e4067a netbios.sys
fc870000 31e4069b Parallel.SYS
fc530000 31e406b1 Serial.SYS
fc3b0000 31741b3c mup.sys

Address dump Build [1301]
fec22404 00143e00 00143e00 ffdff000 00070b02
001471c0 00144000 00144000 ffdff000 c30000 00000001
001471d0 00122000 f0003fe0 f0380000 e133c434 e133c440
00147364 003623f0 0000023c 00000034 00000000 00000000

Restart and set the recovery options in the system co
or the /CRASHDUMP system start option.

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BSOD can be caused due to virus, faulty RAM, bad hard drive, loose cabling, corrupt software, etc.

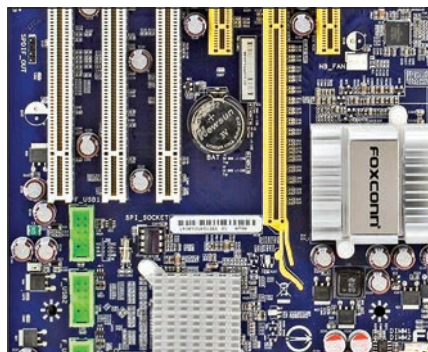
been securing the PC and a virus or Trojan might have entered/attacked your PC. Depending on the type of Trojan or virus, the PC might misbehave, throw up errors, underperform, or randomly crash. These activities are usually blocked by antivirus utilities and firewalls, which might not have been active in your case. Henceforth, use a good antivirus (either free or paid) and always keep both

the antivirus and the operating system updated to prevent viruses and Trojans. Make sure to backup your important data at least once a week.

[Q] Hello Dr CHIP. I have a Dual Core E2180 2 GHz processor, 1.87 GB of RAM and a 250 GB HDD on my PC and it runs smoothly. At times when I power on my PC, I receive an error message stating “Please select a proper boot drive and continue”. Before my present 250 GB HDD, I had a 180 GB hard drive and with that too I had the same problem. I have a temporary solution for this — I disconnect the SATA cable and then plug it back in and also check the RAM slots subsequently. The first boot drive is set to the SATA hard drive in the BIOS. I need a permanent solution for this problem. Thanks.

— CHIP Reader

[A] Hello there. There can be a few possible reasons for the problem with your PC. Either the CMOS battery of your motherboard is weak or it might be dead, or there is an issue with the hard drive data or power cable. There can also be a problem with your motherboard. A virus infection could also be wiping the boot area of your hard drive. You will need to do a step-by-step analysis of your PC by changing the cables and battery and scanning for viruses.



If the CMOS battery on the motherboard is weak or dead, the BIOS settings are reset to defaults.

[Q] Hello Dr CHIP. I have a problem with my desktop (assembled) PC. My desktop configuration is Intel Core i5 750 2.67 GHz processor, 4 GB RAM, 500 GB hard drive, and 1 GB ATI Radeon HD 4300/4500 series graphics card. My desktop presently has Windows 7 Ultimate 32-bit operating system. Whenever I switch on my PC, it makes some loud sounds till it

completely ends the entire booting process, but this sound gets even worse when it's the winter season and during early mornings. Could you please suggest a solution for this problem? Also, my cabinet has a small opening at the bottom which is present by default.

— Macharla Sainath

[A] Hello Macharla. I am not sure of what type of noises are emanating from the PC, but all I can think of is the noise from the internal fans. The noises can be possibly coming from the power supply fans, cabinet fans or the processor cooling fan. Open the computer case power on the PC. Locate the noisy area



The noises could be coming from the power supply fans, cabinet fans or the processor cooling fan.

and pinpoint the exact fan which is making the sounds. Now turn off the PC and remove/disconnect that fan. If it is the power supply fan, disconnect and remove the power supply unit and open it carefully. Be careful as the power supply unit deals with high power voltages and can even injure you when it is powered off. This is because the large capacitors inside the PSU still retain high voltages for a while. Let the power supply unit lie for around 15 minutes before you open it. You should then clean the fans thoroughly using a brush and a blower. If the fans are still making noise after cleaning, you could remove the fans, dismantle the fan blades and add a few drops of machine oil on the shafts and between the magnet and coil assembly. But this practice is usually not recommended as the fans will work only for a few days or weeks and the problem will arise again. You should replace the fans with the right specifications to be safe. ☐

— Send your queries to Francis D'Sa at drchip@chip.in

Wireless Networking: Secured and Tweaked

Here are a few tips to help you fine tune your wireless network and secure it shut from snooping intruders.

BY FRANCIS D'SA



Nobody likes the idea of being connected to the Internet or local network using wires any more. Wireless networking is the best way to keep those irritating interconnecting wires out of your way. With the prices of wireless routers dropping below the Rs 2,000 margin, everyone seems to be flooding the air waves with wireless frequencies. Sooner or later, you will find that your router is not performing as you were promised; it either drops signals or is simply slower than usual. You've obviously read the news of unsecured wireless networks being hacked by terror groups. Let us help you secure your wireless router to the maximum possible security level and also fine tune your router to get the best performance out of it.

Security

PASSWORDS: The first step towards securing a router is to use a strong password using a combination of characters and alphabets. Don't forget to make it a lengthy one and try not to use dictionary words or typical passwords that can be thought of by friends or relatives. These passwords would be used at the administration level of the router as well as on the wireless network, where devices will be connecting wirelessly. Never give out your username and password to anyone. If you do so, make sure you change the same immediately after they have left. Change the default administrator passwords of your router when you start to configure your network.

WIRELESS SECURITY: You may be aware of the WEP and WPA/WPA2 PSK security modes for wireless networks. WEP is more vulnerable and can be

Administration Setup Wireless Security Access Restr...

Router Password: *****
Re-enter to confirm: *****

Local Router Access: Router Password: *****

Web Access: Access Server: ☒ HTTP ☐ HTTPS
Wireless Access Web: ☒ Enable ☐ Disable

Remote Router Access: Remote Management: ☐ Enable ☒ Disable
Management Port: 8080
Use https: ☐

Make sure you change the default passwords for the administration of the router.

Security Basic Wireless Settings Wireless Security Wireless...

Disabled
Disabled
WPA Personal
WPA Enterprise
WPA2 Personal
WPA2 Enterprise
RADIUS
WEP

Choose WPA2 Personal as the security mode for more secure wireless networking.

Router Name: WRT54GL
Host Name:
Domain Name:
MTU: Auto
Size: 1500

Local IP Address: 10.20.150.1
Subnet Mask: 255.255.255.0

DHCP Server: ☒ Enable ☐ Disable
Starting IP Address: 192.168.1.100
Maximum Number of DHCP Users: 50
Client Lease Time: 0 minutes (0 means one day)
Static DNS 1: 0.0.0.0

If possible, change the default IP address and set the DHCP range to match number of machines.

more easily hacked than WPA modes, so employing a WEP password is pointless. Opt for the WPA/WPA2 mode over WEP for more robust security.

FIREWALL: Don't forget to enable the router's default firewall. This can help protect it from hackers and viruses that can attack your local network via the Internet. Even though the router's firewall is not top-of-the-line, some security is better than none. In conjunction with this firewall, you should enable a strong software firewall and Internet security suite on your computer(s) as well.

IP ADDRESS RANGE: If you want a slightly more secure level of networking, change the default IP address of your network from the most common 192.168.xxx.xxx series to something like 10.xxx.xxx.xxx or 172.xxx.xxx.xxx. This way, a person trying to enter your network would have to try various IP address combinations.

DHCP: This is a service built into your router that automatically provides an IP address to every computer which requests a connection. You should disable this service and practice the static IP distribution strategy. Using this technique, a person trying to enter the network would not know the IP address range of your network and would have to try different configurations to get access. Make a note of the addresses, such as Gateway, Subnet Mask and DNS IP Addresses which should be fed into every computer that needs to be connected on the network. If you want to use the DHCP service, make sure that the range of DHCP addresses does not exceed the number of computers that will be connected to it.

STATIC DHCP: This is another method of securing the local network, where the DHCP server will allocate a particular IP address only to that particular machine using its unique MAC address.

MAC FILTER: This is one of the most secure ways of keeping intruders away from your network. You can use the MAC filter of the router to grant or deny access to particular machines that try to gain access to your network. It can even deny access to a user who knows the IP address and password to your network.

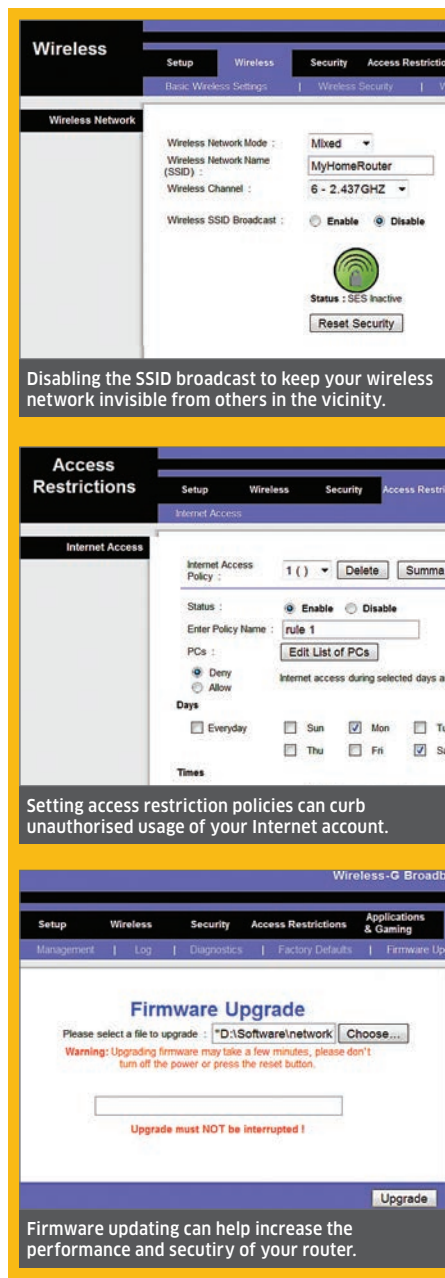
CHANGE PASSWORDS RANDOMLY: Change passwords at least once or twice a month. This can act as an additional security level and lock out an undetected client logged on to your network.

SCAN YOUR NETWORK OFTEN: Use a utility such as 'Angry IP Scanner' for Windows or 'Network Discovery' for Android-based mobile phones for surprise checks on your network to trace intruders. The utility can pickup IP addresses and host names of clients who have logged into your router and are presently active on the network. You can also check this using the router's logging feature.

SSID: The main culprit in allowing hackers to know about your wireless network's presence is the broadcast of an SSID name. An SSID is a unique name for your wireless network, which is usually set by you when you configure the router. Choose to disable the SSID broadcast to disappear from the wireless airwaves. In this way, only you would know what your wireless network name is.

WPS: Wireless Protected Setup is a feature added to all recently released wireless routers. With the WPS feature, if a client needs to gain access to your network, he/she would have to physically press the WPS button on the wireless router. There are no passwords to be entered as the WPS mode fulfills the security option. In this way, there is no need to reveal the wireless password to guest users on the network.

TRANSMISSION POWER: If transmission power is set to High or Very High, your router may broadcast signals far beyond the required range, increasing the risk of intrusions. Set this range to a preset value that is sufficient enough to reach only your computers. Use utilities such as 'NetStumbler' or 'inSSIDer' for Windows on a laptop or 'WiFi Analyzer' on an Android-based phone to know how far



your wireless radio is transmitting. Reduce the radio power accordingly.

LOCATION OF THE ROUTER: The router's location in your premises also determines how and where the radio waves are being transmitted. As most routers use an omni-directional antenna, the radio waves are spread all around instead of being thrown in a single direction. Hence, routers placed near a wall have their transmission divided, so half the signal goes outside the room. This way, your network is seen outside your area and there is a loss of power because the radio waves are not being efficiently used. Always place the router in the central zone of the entire coverage

area to make the best use of the wireless power and also lower the leakage of the radio waves outside your work area.

ACCESS RESTRICTION: If your router features WAN access policies, make use of this feature to allow/deny clients from using the network or Internet during certain parts of the day or week. You can time your router to allow clients to use the network according to your allowed time or even block access to certain websites, ports and services. If you keep your router powered-on 24x7, you can use this feature to disable network access during the nights when you will not be using the network. Another way is to physically switch-off the router. This way, you will save power, increase the life of your router and also provide the best security to your network.

REMOTE ADMINISTRATION: Disable all options that can allow a person to access your router from the network. If your router features the option to disable remote administration from wireless networks or only from particular IP addresses, use it.

REMOTE LOGGING: Enabling this feature is beneficial as the router can notify you about any activity on your network via an email, SMS or the router's memory itself. Depending on your router's firmware design, the logging feature can notify activities such as network access, intrusion, router changes, and more.

FIRMWARE UPDATES AND BACKUPS: Regularly checking for new firmware releases can help increase the router's security, features and performance. Keep track of the new firmware's capabilities and drawbacks by checking related forums and to keep away from buggy firmware. Backup your router's settings in case you need to hard-reset your router for any reason. This will save you time when reconfiguring the router and especially help you in case you miss any security option you had configured earlier.

WIRED OR WIRELESS: If your router has a physical switch to turn off wireless, you can use this feature to disable wireless networking when you are not using any wireless devices. This feature only turns off the wireless network while keeping the computers on the wired network untouched. This feature also saves you the trouble of logging into your router's firmware and switching off the radio from the firmware.

PROTOCOL DEPENDANT: Check all your computers and handhelds that use the wireless networking feature to find out which wireless protocol they use. If you have all devices using the 802.11 b, g or n protocol, it makes sense to switch your router to the particular protocol only. For example, if all your connections are using Wi-Fi n only, then set your router to use Wi-Fi n only, instead of having it in mixed mode. In this way, a hacker using an 802.11 g WLAN card cannot gain access to your network.

GUEST SSID: A few new router models are seen featuring an additional virtual network called Guest network or Guest SSID, which allows your friends or guests to gain temporary access to your network to access the Internet. This Guest network isolates all other computers in the LAN from the guest user and denies permissions to shared drives. It is a great feature for allowing Internet access but blocking access to the local network. Enable this feature only if you need it.

Performance

CHANNELS: As other wireless devices such as Bluetooth peripherals, cordless phones, microwave ovens, etc use the same 2.4 GHz frequency band as a wireless router, there will be a lot of interference between them. Other wireless routers in your neighborhood may also add to the traffic. These interferences can greatly affect the performance of your router, causing data transfer losses and random connection drops. Since there is no way you can alter/change the operating channels of other devices, you can change the router's channel and reduce this interference. There is no way you can find out which channels the other electronic devices use, but you can find out which channels are being used by the other wireless routers around you. Use the 'NetStumbler' or 'inSSIDer' utility to find out the channel numbers the other routers are presently operating on. Once you know this, you can change your router's operating channel to the one that is least used. Usually, all routers are set to auto channel mode, which automatically selects the best channel to operate in. The channels that are the best to use are usually channels 1, 6 and 11 as they never overlap each other. But as most routers are set to auto mode, these channels are usually

Set your router's channel operating range in an unused channel for better performance.

Angry IP Scanner 2.2.1

IP	Port	Hostname
10.20.100.100	0 ms	Dede-DC
10.20.100.101	0 ms	Dede-ADC
10.20.100.102	0 ms	James-Vincent@18.in
10.20.100.103	Dead	N/S
10.20.100.104	Dead	N/S
10.20.100.105	0 ms	DKFL100048
10.20.100.106	Dead	N/S
10.20.100.107	Dead	N/S
10.20.100.108	Dead	N/S
10.20.100.109	0 ms	DKFL100001
10.20.100.110	Dead	N/S
10.20.100.111	0 ms	JamesPC
10.20.100.112	Dead	N/S
10.20.100.113	Dead	N/S
10.20.100.114	0 ms	DKSPED0083
10.20.100.115	0 ms	DKSPED0070
10.20.100.116	Dead	N/S
10.20.100.117	0 ms	DKSPED0070
10.20.100.118	Dead	N/S
10.20.100.119	Dead	N/S
10.20.100.120	0 ms	DKSPED0001

Frequently scan your network IP addresses to help detect unauthorised network entry from hackers.

BELKIN Router Setup

Wireless > Channel and SSID

To make changes to the wireless settings of the router, make the changes here. Click "Apply Changes" to save the settings. If you click "Cancel Changes", the changes will be discarded.

Wireless Channel: 11 (Auto)

Wireless Mode: Mixed

Wireless SSID: Belkin11_5GHz

Protected Mode: Off

Clear Changes Apply Changes

If available, use a second SSID for guests and friends to allow a temporary isolated network.

occupied. Few unique router models and others flashed with the DD-WRT open source software can enable the router to operate on channels 12, 13 or 14, which are rarely used. If you have this feature, make the best use of it after trying it out. If your router and wireless clients support the 5 GHz frequency band, it is recommended to use this mode as the 5 GHz band has completely different and numerous channel numbers, which are usually free. The drawback of using the 5 GHz band is lower range, slightly slower speeds and increased power consumption.

POSITION YOUR ROUTER: The position of your router affects the performance of the network radio in a great way. Keep

your router off the floor and away from walls, metal furniture and other electrical and electronic devices. Obstructions such as walls, floors, and metal objects can weaken the radio signals by either blocking or absorbing them. Never keep a router in a cabinet or besides other electronic devices, such as a cordless phone base.

REPLACE YOUR ROUTER'S STOCK

ANTENNA: Your router uses a low gain Omni-directional antenna, which is meant for a particular range indoors or outdoors. If you want the signals to be better and cover up a larger area, use a high-gain antenna, which focuses the signals in a particular direction rather than all around it. In this way, you can aim the signals in the direction that you need. Though these antennae are not easily available, it is not impossible to get them either.

USE A REPEATER OR ACCESS POINT:

If you need a wireless network to cover a larger area, you can also opt for a few other remedies. You can flash an old router with a DD-WRT firmware and convert it into a repeater, a bridge, or an access point. You can also deploy access points or routers that feature WDS to increase the coverage area of your wireless network.

ALWAYS USE EQUIPMENT FROM A SINGLE MANUFACTURER:

While a D-link WLAN card will definitely function with a Netgear router, it is always advisable to opt for an adapter and router from the same manufacturer. This will provide better compatibility and superior performance as the manufacturer designs the products to be more efficient when used together.

UPGRADE YOUR WIRELESS CLIENTS TO THE LATEST TECHNOLOGY:

If you are using older generation 802.11 b or 802.11 g devices, it is advisable to use the latest 802.11 n technology-based devices for superior performance and increased coverage area. When buying new wireless devices, always opt for those with 802.11 n support.

SOFTWARE UPDATES: Always keep your router's firmware and your WLAN network adapter's driver up-to-date. The manufacturers regularly improve their hardware drivers for better performance, compatibility and stability. This way, you will have fewer connection problems and network issues. ■

- francis.dsa@chip.in

Phrase it Right

Save time and speed up your work by automating common and repetitive text entry tasks.

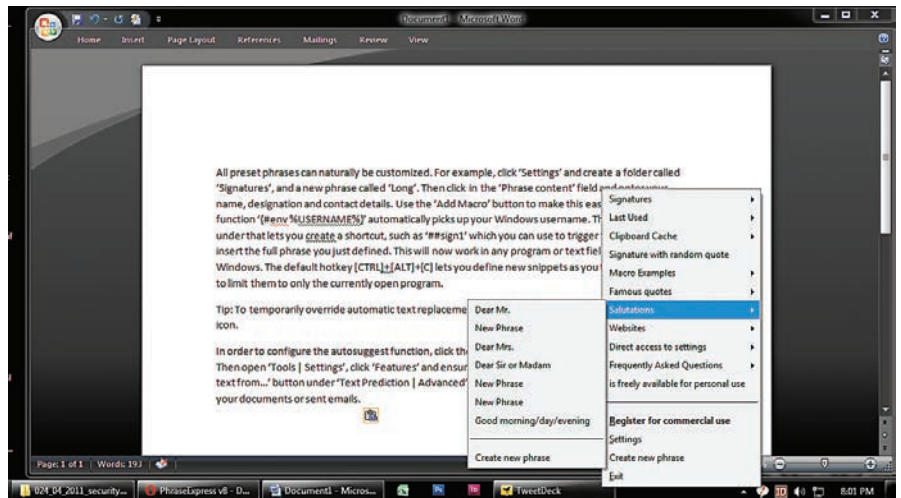
BY JAMSHED AVARI

People often need to type the same information repeatedly, such as signatures, addresses, comments, or standard form responses. The tool PhraseExpress can manage snippets of text across the entire system, identify them when you begin typing, and then autocomplete them. The program can save a lot of time as well as reduce typing strain and help correct spellings in programs that don't have spellcheckers. It's freely available for personal use, but it will ask you to buy the premium version if it detects repeated use of business-centric terms such as 'client', but could still be worth the investment.

Download the software from www.phraseexpress.com and allow the program to load on startup during the installation. An icon will appear in the Windows system tray; in Windows 7, you can drag it from the popup area back into the taskbar to make sure it's always visible.

Using functions and abbreviations

PhraseExpress has numerous predefined phrases and quotes as well as a few abbreviations. To add further text snippets to the database, click the icon in system tray then click 'Create new phrase', or select one of the category folders in the



The popup menu can be used to select a phrase or macro, but it's quicker to define hotkeys.

menu and create it there.

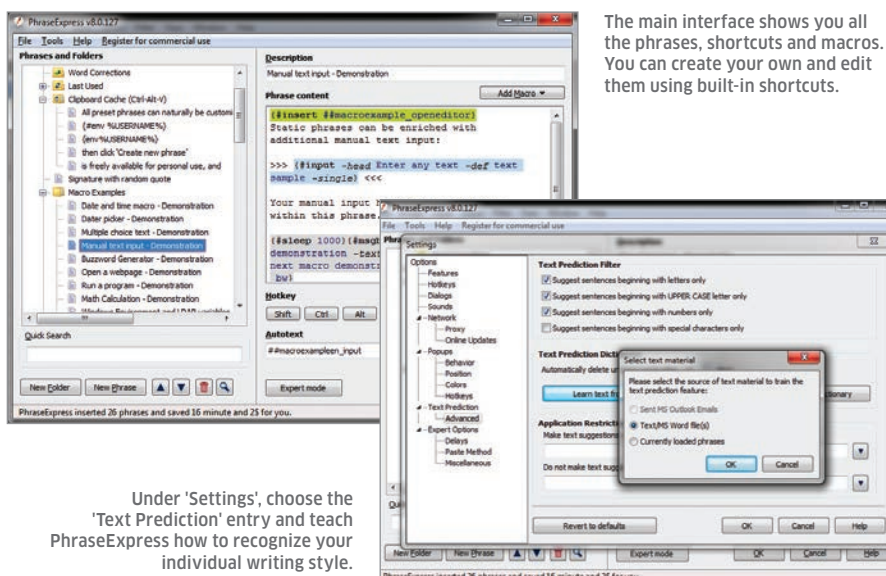
To browse through the preloaded abbreviations, click the icon and select 'Settings'. Take a little time to study individual entries at least in the 'Addresses', 'Signatures' and 'AutoCorrect' folders. All preset phrases can naturally be customized. For example, click 'Settings' and create a folder called 'Signatures', and a new phrase called 'Long'. Then click in the 'Phrase content' field and enter your name, designation and contact details. Use the 'Add Macro' button to make this

easier, for example the function '{#env %USERNAME%}' automatically picks up your Windows username. The field 'Autotext' under that lets you create a shortcut, such as '##sign1' which you can use to trigger the program to insert the full phrase you just defined. This will now work in any program or text field anywhere in Windows. The default hotkey [CTRL]+[ALT]+[C] lets you define new snippets as you type, with the option to limit them to only the currently open program.

TIP: To temporarily override automatic text replacement, hold down [CTRL] and click the system tray icon.

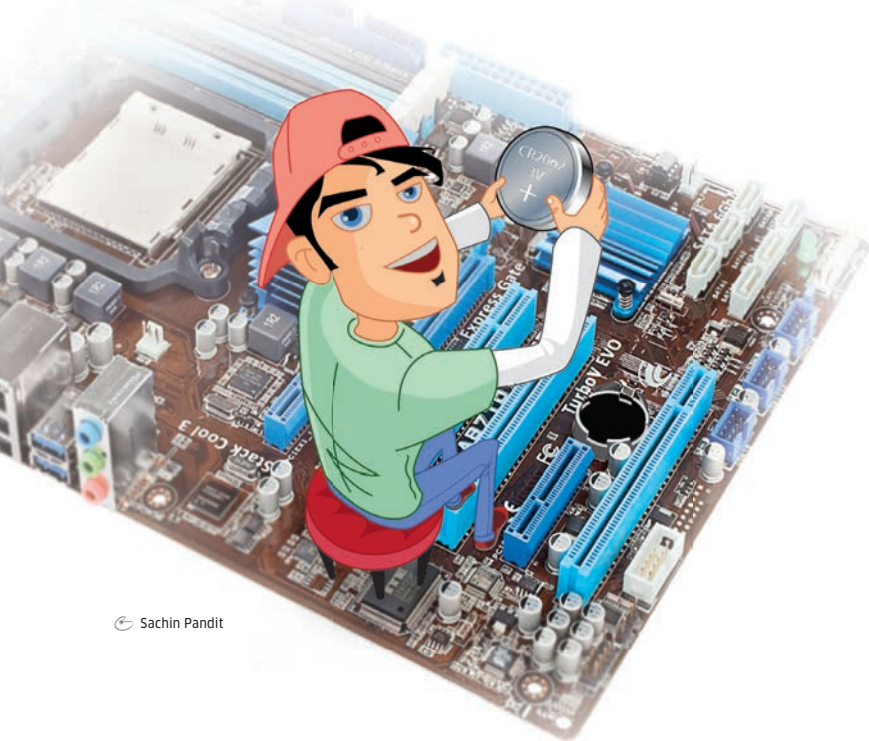
In order to configure the autosuggest function, click the PhraseExpress icon the and select 'Settings'. Then open 'Tools | Settings', click 'Features' and ensure that 'Text prediction' is activated. The 'Learn text from...' button under 'Text Prediction | Advanced' lets the program learn your writing patterns from your documents or sent emails. The program can also let you define hotkeys to trigger inserting any text snippet or carrying out any macro. Macros can include loading websites, picking calendar dates, switching keyboard layouts, and manipulating text formatting. There's much more to explore, which you can also learn at the program's own website. www.phraseexpress.com

- jamshed.avari@chip.in



The main interface shows you all the phrases, shortcuts and macros. You can create your own and edit them using built-in shortcuts.

Under 'Settings', choose the 'Text Prediction' entry and teach PhraseExpress how to recognize your individual writing style.



Sachin Pandit

Tips & Tricks

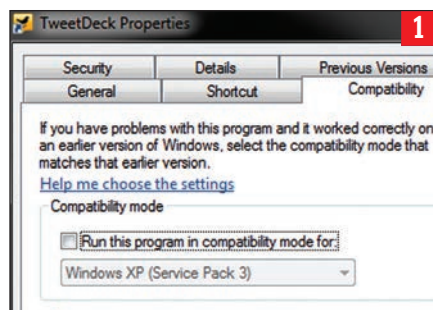
APRIL 2011

SHARE YOUR TIPS. Write to: tnt@chip.in

WINDOWS

1 Windows 7 Switch off Aero interface automatically or program-specifically

You need to switch off the Aero effects in Windows for taking screenshots or for some games, but using the display properties dialog box each time is extremely tedious.



This simple setting will ensure that the program runs without consuming extra system resources.

CHIP TIP You can automate this task by means of a property in the shortcut with which you can call up a specific program, such as the Screenshot tool. The programs get more graphics power when the Aero is switched off. The PC thus has a little more breathing room in case of intensive graphics applications such as games.

Search for the link to call up the

relevant program on the Desktop or in the Start menu. Right click it and select the context command 'Properties'. Then switch to the 'Compatibility' tab and activate the option 'Disable desktop composition' in the 'Settings' area.

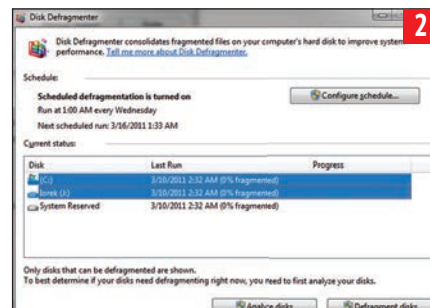
Confirm this change with 'OK'. After this, Windows automatically switches to the 'Windows 7 Basic' color scheme when you start the relevant program. Windows automatically switches back to the previous scheme as soon as you close the program.

NOTE: When calling up Windows' built-in components, it is not possible to set compatibility options. A shortcut to 'notepad.exe' is thus not suitable for this trick.

2 Windows XP, Vista, 7 Defragment several disks automatically without monitoring

Regular defragmentation keeps the system performance consistent. But you cannot sit at your PC through this entire process. What is also irritating is that defragmentation needs to be manually activated if there are several hard disks.

CHIP TIP The graphical interface of Windows' defragmenter does not provide the option to process several drives one



Select multiple drives by holding down the [CTRL] key while clicking.

after the other, at least under XP. What a lot of people don't know is that Windows has an additional command line tool called 'defrag.exe' that is suitable for batch processing as well. You can use it to automate the defragmentation of several drives. If you operate a system with the drives C, D and E for instance, enter the following in Notepad:

```
@echo off
defrag.exe -f c
defrag.exe -f d
defrag.exe -f e
```

Save the file as 'defrag.cmd'. If you are using other drive names or more drives, change the file accordingly. Double click this file to defragment all hard disk partitions one after the other automatically without a break. However you need to be logged in with administrator rights for running the file. The used parameter '-f' carries out the defragmentation even if the hard disk has

less than 10 percent free space, without pausing for an error message. But the process takes too long in that case. What you can do is delete the large files that are no longer required.

Vista and Windows 7 regulate defragmentation automatically on the basis of a schedule. Irrespective of that, you can either use the batch processing operation via 'defrag.exe' or even select several drives simultaneously with the graphical interface.

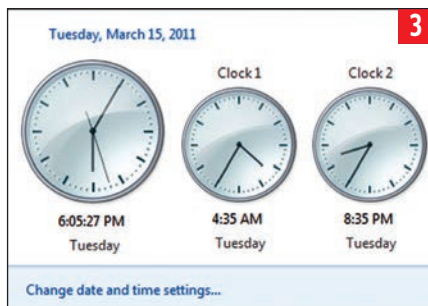
For this, right click a drive entry (e.g. in Explorer) for both the versions, select the context command 'Properties', activate the tab 'Tools' and then click the 'Defragment now' button. Under Vista, click the 'Select Volumes' button and you can then activate several drives for defragmentation or select 'Select all data carriers'. Under Win7, keep the [Ctrl] key pressed and then select the desired drives by clicking the entries one after the other.

3

Windows Vista, 7

Get a constant overview of several time zones

When making a call to another country such as the USA, you don't want to inadvertently wake someone up in the middle of the night. But this can actually happen if you do not pay attention to the time difference.



Additional clocks can be placed in the system tray to help you work better with international clients.

CHIP
TIP

Windows provides help in displaying several time zones. Click the clock to the right of the taskbar. A window with an analog clock and a calendar is displayed. Use the 'Change Date and Time Settings' link in this window. The 'Date and Time' dialog box opens. Activate the 'Additional times' tab in it. This tab can be opened via the control panel as well as via the 'Time,

Language and Region' and 'Add times for different time zones'.

Alternatively, in the classic view of the Control Panel, double click 'Date and Time' and activate the 'Additional Times' tab. You can define up to two more time zones that Windows then displays near the analog clock with the local time. For this, there are two 'Display this time' fields in the 'Additional Times' tab. Checkmark the heading to activate the field. You can then select 'Select time zone' and 'Enter display name' with the help of which you can later identify the time zone. The country name would be an ideal entry. Repeat these settings for the third time if required and confirm with 'OK'.

Now after clicking the taskbar clock, Windows will show both additional time zones. If you simply hover the cursor over the time, a small tooltip with the current date and the various times is displayed.

4

Windows XP, Vista, 7

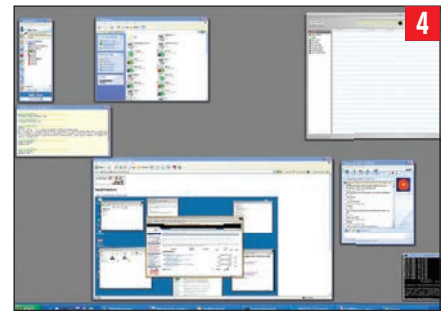
Switch between applications quickly with Apple's Exposé function

When you flick the cursor to a specific corner of the monitor, Exposé shows thumbnails of all active programs minimised on the desktop. You can then quickly switch to another application – but only on Mac OS X.

CHIP
TIP

The tool SmallWindows equips Windows with the practical Exposé functionality of Mac OS X. SmallWindows has two functions: It either minimizes all windows so that it is easy to toggle between applications, or it moves all windows to the screen border so that you get a free view of the desktop. You can download it from <http://smallwindows.sourceforge.net>. A wizard guides you through the setup. Under Vista and Windows 7, you need to authorize the installation by selecting a user account with administrator rights and entering the relevant password if needed.

At the time of the first start, configure the program asks whether Windows should automatically load it during startup so that it is at your disposal immediately, so confirm the query with 'Yes'. After the start, a new icon is displayed in the system notification area. Right click it and select the context



Add the cool Exposé feature to Windows XP with this simple free tool.

command 'Settings' to open the dialog box for configuring the application. Here you can also deactivate the automatic start during system start by removing the checkmark on 'Start when Windows starts'.

The hot zones are the four corners of the desktop via which you can activate SmallWindows. For every hot zone, define a reaction using the relevant field. In case of all 'All', Windows displays all the open programs in one minimized view. You can select a program with just a click and bring it into foreground. You can deactivate the function with 'None'. 'Desktop' moves all windows to the screen border and gives a free view of the desktop. 'Related' minimizes the current program. This function is however of no use otherwise. In addition to flicking the mouse, you can also define key combinations for individual functions via 'Hotkey Activation'.

5

Windows 7

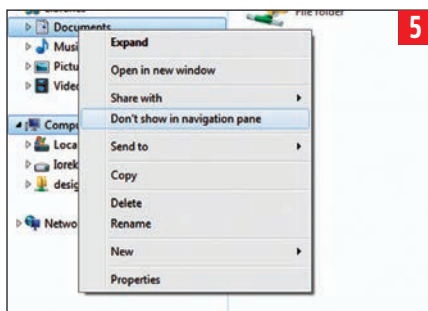
Hide unused libraries in Windows Explorer

The Libraries function in Windows 7 help in structuring data. But a lot of users still prefer the conventional folder structure.

CHIP
TIP

In such a case, you can hide the libraries and thus make space for displaying more folders. For this, right click the first library 'Pictures' and select the context command 'Do not display in navigation field'. Repeat this step for all other unused libraries. In order to display individual entries again, click 'Libraries' in Explorer. Then right click the desired element and select the context command 'Display in navigation field'.

The main entry 'Libraries' cannot be deleted so easily. To do this, a detour



Reduce clutter by hiding unnecessary Library targets from the Explorer pane.

via the registry is necessary. Type 'regedit' in the search field of the Start menu, press Enter, and confirm the user account control prompt by clicking 'Yes'. Now navigate to the key 'HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Explorer\Desktop\NameSpace'. Then select the sub-key '{031E48257B94-4dc3-B131-E946B44C8DD5}' and open 'File | Export'. Then select a safe storage location, enter a file name such as 'Explorerlibraries' and click 'Save'. This is to back up the entry. Then simply delete the subkey in the Registry Editor and confirm with 'Yes'. Now close the registry and restart Windows Explorer. A system restart is not required.

In order to display the libraries again, double click the exported REG file and confirm the requests for user account control and adding values into the registry with 'Yes'. The libraries will be visible once again the next time you start Explorer.

6 Windows 7 Add data types to hard drive cleaning

Hard drive cleaning helps in tracking trash on the system. Unfortunately, the functionality is restricted to predefined file types.

CHIP TIP You can add more data types for this function to clean out. For this, right click a free place on the desktop and select 'New | Shortcut'. Enter the following command in the 'Item location' input field:

```
C:\windows\system32\cmd.exe
/c cleanmgr /sageset:4711 &
cleanmgr /sagerun:4711
```

and confirm with 'Next'. On the second page, define a name for the new link

QUICK TIPS

FETCH QUICK HELP

Just like you can use the [F1] key to bring up the Help window for the currently active program, you can use the combination [Win]+[F1] to directly open the Windows Help and Support Center.

DISABLE HIBERNATION

For this, go to the Control Panel of Windows XP, open 'Power Options' and deactivate 'Enable Hibernation' in the 'Hibernation' tab.

CREATE SELF-EXTRACTING ARCHIVES

When you open 'Start | Run' in Windows 7, you can create self-extracting archive files using the 'ieexpress' command.

DOWNSIZE TASKBAR ICONS

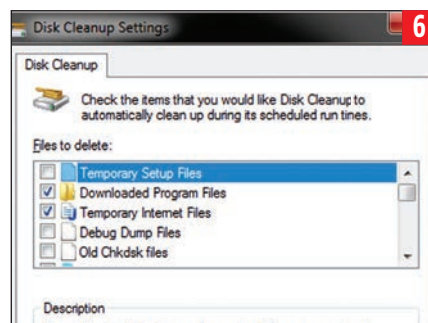
Right click 'Start' in Windows 7, select 'Properties' and activate 'Use small icons' under 'Taskbar'.

OPEN USER ACCOUNT DIALOG

You can access the dialog box for setting up a user account under Windows Vista and Windows 7 by running 'Control userpasswords2' via the Start menu search box.

such as 'Hard drive cleaning selection'. Then click 'Finish'. If you use this link to run the Disk Cleanup utility in the future, you will see more entries such as 'Old CHKDSK files', 'Setup log files', 'System error memory dump files' and 'Log files for Windows Upgrades' for selection. The command behind this link makes Windows call up the hard drive cleaning utility 'cleanmgr.exe' twice, with different start options. First with 'sageset' and then with 'sagerun'. The number after the start options must always be identical and must be between 1 and 65535.

The option 'sageset' results in Windows opening the 'Settings for

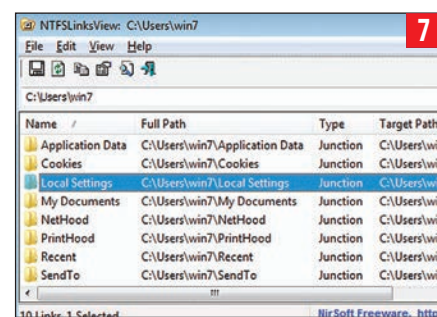


Additional options for cleaning up disk space can be revealed.

cleaning the hard drive' dialog box in which the drive cleaning settings can be configured. The system then saves this configuration in the registry under the specified number. The option 'sagerun' then executes the configuration saved under the specified number.

7 Windows Vista, 7 Define the actual folders hidden behind shortcuts

From Vista onwards, specific folders seem exist for the sake of compatibility, but actually redirect to other real folders. This messes up scripts and batch files you've written yourself.



Backward compatibility is maintained through logical shortcuts called Junction Points.

CHIP TIP These shortcuts, called junction points, exist throughout Windows. For example, programs can try to save data to the old 'Documents and Settings' folder, but will be seamlessly redirected to the applicable new 'Users' folder. The operating system however hides this persistently. Attempts to access the junction points directly (Windows displays them if you enable the display of the system files via the folder options) are aborted with an error message. And another stumbling block is that real folder names need to be used in scripts or batch files. Else, they hang during execution.

The free tool NTFSLinks-View provides help. It lists the active junctions in the system. Download the program from www.nirsoft.net/utills/ntfs_links_view.html. The tool 'nftslinksview.exe' can immediately be started. The program lists all active junctions in the folder of your user profile.

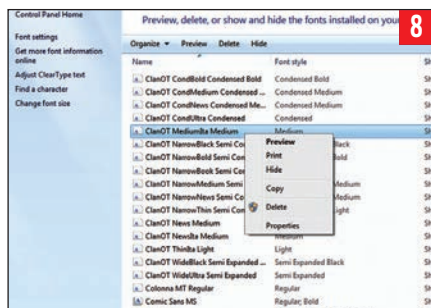
In the 'Target Path' column, it displays the relevant real folder which the junction controls in the 'Full Path' column. Right

click an entry and select the context command 'Open Target Path' to open this target folder in Explorer.

In order to check other directories, enter the folder in the input field, e.g. 'C' and click 'Go'. Use the key combination [Ctrl]+[A] to select all entries and then 'Save' them to a text file using 'File | Save selected items'.

8 Windows Vista, 7 Install new fonts and manage them centrally

Windows 7 has a wide range of fonts but they are still not enough for some users. Unfortunately, a command for installing more fonts is not available in the font folder at first glance.



Simplify font management with Windows' own built-in tools.

CHIP TIP In order to configure fonts, click 'Appearance and Personalization' in the Control Panel and then 'Fonts'. In this view, every entry already has a mini preview of the relevant font.

There are several options for installing new font types. It is usually enough to copy the new font file into the folder 'C:\Windows\Fonts'. The disadvantage of this method is that only the file name and not the font name is later displayed in applications. It is thus better to select one of the following procedures: Open the folder with the desired font file in Windows Explorer. Right click the file entry and select the context command 'Install'. Even the preview window of the font type which opens on double clicking has an 'Install' button. A click on it integrates the font into the system.

The other option is to open the Fonts folder and press [Alt]. Windows then displays the menu bar. Click 'New Font' in the 'File' menu, navigate to where the new font is saved and open the file.

You can also uninstall fonts via

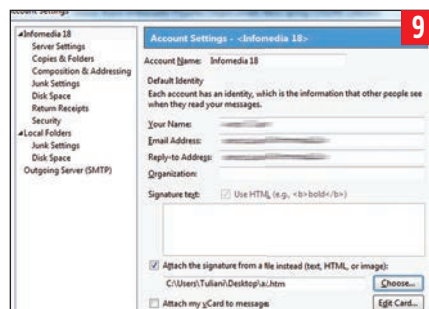
the 'Fonts' folder, for example, using the context menu command 'Delete'. System-relevant ones are an exception. Today's computers are so potent that system performance is not affected even if a lot of fonts are installed.

If you just want to reduce the number of fonts displayed in the selection lists, you can simply deactivate the unused ones. These then continue to be in the system but cannot be used. For this, right click the entry and select the context command 'Hide'. You can reactivate the font at a later time using the context command 'Show'. But unfortunately, not all programs respect this option. Microsoft Office 2010 continues to display all fonts.

APPLICATIONS

9 Thunderbird Create e-mail signatures with text and images

Instead of a signature that just contains the sender details, it's possible to create a sophisticated signature with an image or logo.



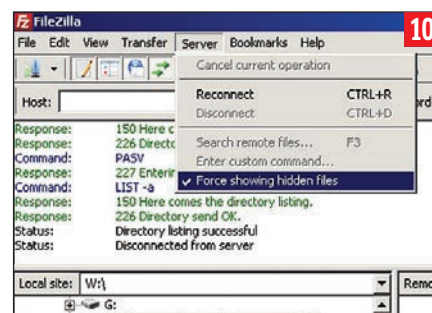
Signatures with logos lend your emails a more professional feel.

CHIP TIP Thunderbird supports text-based signatures, but if you need images to go with your signature, you will have to code it as an HTML file. You can use the Word editor to arrange your image and text settings. Save the file as a webpage. Next, open Thunderbird, 'Tools | Account Settings'. Next, select the e-mail account to add the signature. Now, select the 'attach the signature from a file instead' and select the created HTML file. For this to work, make sure that the messages are being sent in HTML format. To enable, click on 'Composition & Addressing' on the left. Enable the 'write messages in HTML format' option and click OK.

If your image is not showing up in the signature, you will have to convert the image to base64 strings. The process converts the image into its original base code that can be incorporated into an HTML file. To convert the image, go to <http://webcodertools.com/imagetobase64converter>. Load the image, and replace the image in the HTML file with the contents appearing in the Image tag text box, and save the file. The image will then appear in your selected signature.

10 Filezilla Display hidden data on the server

An FTP client normally shows no hidden files on the connected server whose name starts with a leading point. However, if you need to access a file with the name '.htaccess', the FTP client Filezilla can be forced to display the hidden files on the server.



One simple option can give you access to hidden files in Filezilla.

CHIP TIP If you want to see the hidden files on the connected server, you can easily do so by a simple click. If you are using version 3.x, select 'Server' from the menu bar, click the option 'Force show hidden files'. If you are using version 2.x instead, go to 'View'. Here you will find the option to show hidden files.

11 Microsoft Excel Define specific cells as per the maximum value

You want to display the content of one result cell in another which is to the left of the relevant maximum value of a specific data field in the table sheet.

CHIP TIP This task can be carried out using a combination of three simple functions.

The functions are used in one single formula. Just imagine: The fields "B1" to "B4" contain four numbers. If the largest number is in "B3", the result cell should return the value from "A3". For this, enter the formula given here:

**=INDEX(A1:A4,
MATCH(MAX(B1:B4),B1:B4,0),1)**

"MAX(B1:B4)" first identifies the largest value from the data set. This value serves as a search criterion for the comparison that is extended to the search matrix "B1:B4". With the comparison type "0", the function identifies the position of the first value from the search matrix that is identical to the search criteria.

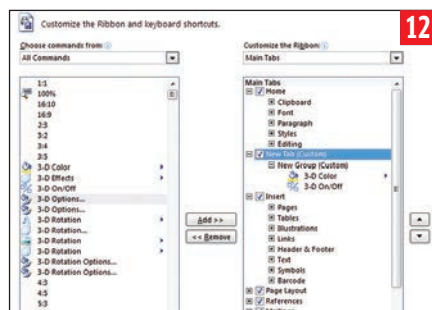
The matrix variant of the "INDEX" function then uses the searched value from the value matrix "A1:A4" that is located in the first column of the row defined by the comparison.

12 Office 2010 Customize the Office Menu to your liking.

The Office Menu 2010 offers many features, but often not where you want it. However, you can customize the menu to your style of working.

CHIP TIP From version 2010 onwards, you can set up the menu in all Office applications individually. To do so, open 'File | Options' and click on 'Customize Ribbon' from the options displayed on the left.

You can even customize the standard commands to a certain extent. To do so, select 'All Tabs' in both the combo-box sets. The section 'Main Tab' defines the available tabs. Individual commands are organized into groups and to display them, click on the plus sign in front of the relevant tabs. You can then move the selected group by a simple drag-and-



You can add, remove and rearrange menu items in the Office ribbon with ease.

QUICK TIPS

SWITCH DIRECTLY TO ONENOTE

If Microsoft's OneNote is open in the background, you can call up the application window to the front with the key combination [Windows] + [Shift] + [N].

BROWSE THROUGH THE OFFICE RIBBON

For switching to a different tab in the menu of an Office application quickly, hover the cursor over it and turn the scroll wheel.

RESTART FIREFOX HOMEPAGE

Your selected homepage can be opened in a new tab by clicking the "Home" icon with middle mouse button.

CHANGE WORD DEFAULT FONT IN MICROSOFT WORD

To do this, open the command 'Format | Font', select the settings for the desired font and click 'Default'.

TAKE A SCREENSHOT OF THE ENTIRE SCREEN

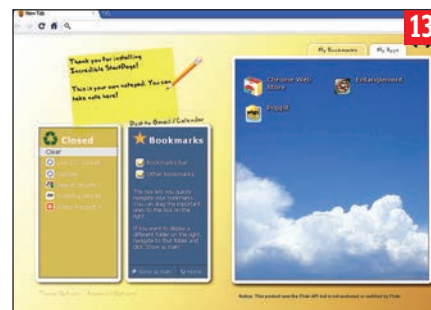
To do this, select the desired area in Excel, keep [Shift] pressed and then select the command 'Edit | Copy Image'.

drop action. But before that, you will have to create a new group, as you cannot add a command to the existing groups. Creating a new group is fairly simple; all you have to do is right-click at the desired place and then click on 'New Group'. You can even rename the group that you have created. For example, in Excel, the group 'Macros' is in the tab 'View'. For immediate access, you can move this to the 'Start' tab.

13 Chrome 4.x onwards Configure multifunctional homepage

In Chrome, the automatically generated selection for new tabs is really practical. Still, you can customize the homepage in the browser for quick selection and other functions. A free Chrome extension called Incredible Startpage helps you configure your Chrome homepage.

CHIP TIP You can customize Chrome to your liking with the free Incredible Startpage extension, which you can easily find online. Once you reach the extensions page, confirm the installation and allow



Incredible Startpage allows you to customize the Google Chrome homepage.

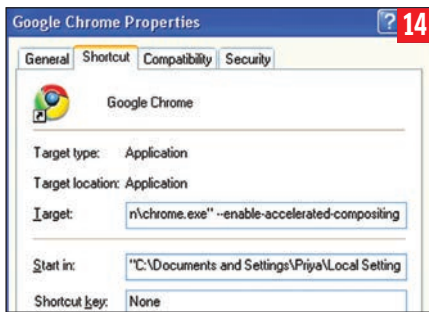
access to personal data by clicking 'Install'. Now open a new tab. To the left, you will see a list of the last closed tabs as well as the bookmarks. To the right, the large field offers a quick selection for a specific folder of bookmarks. To change the displayed contents, navigate to the desired bookmark folder, and click 'Show as main' button at the base of the dialog. Other bookmarks can also be added to the right via drag-and-drop.

You can personalize colors and the background image by clicking 'Theme Options'. To use your own picture, click 'Custom' under 'Wallpapers'. In the next dialog box, enter the URL of the desired photo and confirm with 'Save'. You can also use photos from Flickr as a background. You can add notes for quick access on the yellow notepad that you can send to Gmail or to Google calendar with the allocated links. With the 'Advanced Options' link, you can change the number of the recently closed tabs that should be visible on the page in the 'Maximum recently closed tabs' combination field.

14 Chrome 7 Use hardware graphic acceleration now

Google aspires to boost browser performance with the help of GPU acceleration sometime in the future. But is that possible even now? Adding a parameter in the command link of Chrome ensures faster graphical output.

CHIP TIP The integration of GPU acceleration in Chrome has been set for version 9 of the browser. However, the initial steps are already implemented and can be used in Chrome 7 as well. You can activate it with a command line



Enabling GPU acceleration provides improved graphical performance in Google Chrome.

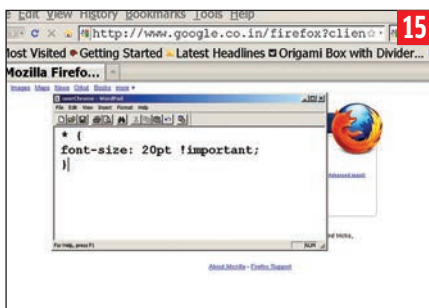
parameter. For this, close Chrome and right-click on its shortcut on the desktop. Select 'Properties' from the context menu and activate the 'Shortcut' tab. Add a space after the contents in the 'Target' text box and add the parameter '--enable-accelerated-compositing'. Click 'Apply' and 'OK' to close the dialog box.

The processor of the graphic card supports rendering the websites once you reload the browser. Depending on the computer configuration, you can get added speed when displaying websites with complex graphical content.

15 Firefox Adjust font size in the Firefox menu

You need to increase the size of the text in Firefox's menu and tool bars, and the Windows controls aren't enough.

CHIP TIP You can increase the font size of the file menu items and reduce the font size of the bookmarks if you find it to be too large. Firefox uses the Windows default settings, so you could increase the DPI value of the system font size. Alternatively, you can customize the required settings by creating a 'userChrome.css' file instead. You can

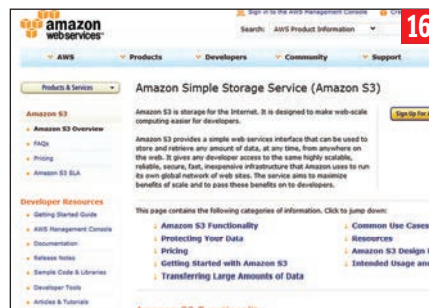


UserChrome.css allows you to change font sizes in the Firefox interface.

find the sample file at 'C:\Documents and Settings\<User Name>\Application Data\Mozilla\Firefox\Profiles\j53h8g9g.default\chrome'. For example, to set the font size to 20 px for all elements of the Firefox interface, add the line '* {font-size: 20pt !important;}'. You can also edit individual elements, but for that, you will have to locate the correct CSS selectors. For more samples of CSS codes, visit <http://www.mozilla.org/unix/customizing.html>.

16 Amazon S3 Back up data using an affordable cloud service

The online storage service is not just for developers. You can use it as a cheap online backup location for all your important files.



Amazon S3 is an online storage service where you only pay for the space you use.

CHIP TIP If you are looking for a simple, inexpensive online Web storage service, opt for Amazon S3. Contrary to the popular belief, this service from Amazon is not just for developers. It is equally useful for home users. It can be used to store your data like music files, videos, pictures etc or you can use it to back up your local hard drive. Instead of folders, there are buckets in which you can store your files. You have to select a region where you wish to store the bucket. Amazon S3 is available in US Standard, EU (Ireland), US West (Northern California), Asia Pacific (Singapore), and Asia Pacific (Tokyo) regions. Select the region closest to you so that you can save time and minimize cost. You can retrieve the files saved in the bucket via a unique developer assigned key. Amazon S3 is also very cost effective, as it functions on the policy that you pay only for what you consume.

- Compiled by Team CHIP
send your tips to tnt@chip.in

Exploring Mumbai's IT Bazaar



LAMINGT

1 'Cassette World' is one of the oldest and most highly reputed stores for all computer hardware. 2 Dr CHIP drooling over roadside stuff. 3 A power supply tester sold on the footpath for Rs 200. 4 Does this bring back old memories? 5 Core 2 Duo-powered phone? 6 An attractive scheme for students: * Conditions apply.

Computer hardware, software, gadgets, electronics components, tools, service centers, and more. Here's what you can find at Lamington Road. BY ANAND TULIANI AND FRANCIS D'SA



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MOTORSTORM APOCALYPSE

RATING 3.5/5



The Motorstorm series hits a road bump

BY MURALI VENUKUMAR

Apocalypse takes the tried and tested Motorstorm formula and sticks it in a crumbling urban environment, complete with freak weather phenomena, toppling buildings, and swollen seas. While a change of pace in the series is welcome, it also makes for a decidedly fractured experience. The game is a mixed bag for sure. The previous games were restricted to racing in natural environments, where not much other than your fellow racers stood between you and your next checkpoint. Apocalypse, on the other hand, throws everything (and the kitchen sink) in, sometimes having a detrimental effect to the simple off-road fun of the old games.

As the name suggests, Apocalypse works around an end-of-the-world scenario set in a city on the west coast of the USA. The game's campaign mode is divided into three tiers of varying difficulty, with each featuring a different character. Each character has a set number of races to complete within their tier. These races must be completed in order and there's no way to skip a race or move up a tier if you hit one of Apocalypse's maddening difficulty spikes. The events are reasonably varied, with chase missions, elimination races and timed challenges all lending some variety to the grind. Moving up a tier also sees the city's condition progressively worsen.

Each tier contains a prologue and epilogue, and the feeble attempts at stringing together a coherent story through cutscenes manage to be both embarrassing and torturous. The protagonists and supporting cast are hideously unlikable, and the art style Evolution picked makes them even more so. Thankfully, there's always a skip button on screen, so you could go through the entire campaign without watching a single cutscene if you wanted to.

The actual racing sees you jumping

from one vehicle class to the next, from monster trucks to superbikes and everything in-between. Vehicle handling is varied between classes, with some vehicles handling better than others. Unfortunately, there's also a twitchiness to the controls that doesn't lend itself too well to the busy environments. The series' boost mechanic returns and while managing your boost becomes an essential during races, a faster cool-down time may have made the races more exciting. You also have the ability to shunt vehicles that cozy up next to you using



the R1 and L1 buttons of the controller. The racing on the whole doesn't feel as satisfactory as it did in Pacific Rift.

The real stars of Apocalypse though, are the environments. Each event gives you a new track to race on, or versions of earlier tracks that feel significantly varied. The tracks are mostly interesting, with the better ones coming with their own set of dynamic world events such as falling buildings and tornadoes. There are also other variables to consider, such as a private militia and gangs of rioters that will often try to inhibit progress.

While also being the most fun tracks to race in, the select dynamic environments also serve to take attention away from a visual presentation that is shaky at best (pun intended). The static tracks give you too many opportunities

to scrutinize bad textures and geometry, and the inadequate anti-aliasing. There's also a problem with random geometry or objects in the world snagging your ride and forcing you to reset to track. As pleasant as the dynamic tracks are, you can't help but feel that the current engine's strength lies firmly in rendering the natural environments of told. The soundtrack is well done (hello, DJ Shadow), but you'll wish that the audio worked much harder than it does to build atmosphere.

Once you're done with the lengthy campaign, there are multiplayer modes (including 4-player splitscreen play) with their own perks and upgrade systems to play, and a Wrecreation mode that lets you retry all the campaign races with any vehicle and with dynamic events turned on or off. Motorstorm: Apocalypse is perfectly playable for what it is as long as you approach it with moderate expectations. A return to basics and a tightened handling model would be most welcome for the inevitable next

game in the series.

- feedback@chip.in

RATINGS

RACING

Motorstorm: Apocalypse

PRICE	Rs 2,499
PUBLISHER	Sony
DEVELOPER	Evolution Studios
DISTRIBUTOR	Milestone Interactive
PHONE	022 42764000
E-MAIL	sales@milestoneinteractive.com
PLATFORM	PS3

FOR

Dynamic environments, varied vehicle classes.

AGAINST

Slightly underwhelming racing, unspectacular graphics, not enough of those dynamic environments.

de blob 2

Give the gift of color BY SAMEER DESAI



RATING
3.5/5

I've never really felt compelled to go out and buy a Wii, but every now and then, there would be a game that made me wish I owned one. Most of these were first party Nintendo games, but in 2008, THQ released a cute little platformer oozing with charm. It pained me to find that De Blob was exclusive to the Wii. Thankfully, its success prompted THQ to release De Blob 2 on PS3 and Xbox 360 as well, and I'm happy to report that barring a few missteps, the sequel retains all of the vibrancy and feel-good fun that the first game was known for.

The concept of De Blob 2 is quite a unique one. The oppressive INKT Corporation headed by the evil Comrade Black has sucked all the color out of Prism City, converting it into a sea of grey and turning its inhabitants into dreary monochromatic slaves. It's up to you – Blob, and your quirky friends to bring color back into the world, one building, tree, vehicle, and citizen at a time. The game features some serious political overtones, but stops short of making it overbearing by throwing in lots of humor via great cutscenes, with its pretty Pixar-ish art style, and by keeping the mood light and lively at all times with a funky soundtrack that gets peppier the more color you inject into the world.

Blob's cute gelatinous body has the ability to store paint, which can either be soaked up through pools of paint or by stomping on paint bots. You can then slither and jump around the city, adding color to everything you touch. Movement is incredibly smooth and

simple, and watching the city transform and burst into color before you and knowing that you made it happen is a truly rewarding feeling. It won't be all rainbows and unicorns though. The INKT Corporation's soldiers will do all they can to foil your revolutionary plans, so in between all the painting, there is a fair amount of combat, even if the difficulty levels never go too high. There is an auto-target mechanism that lets you stomp on or charge at enemies with ease, but targeting enemies manually can get a little tricky, especially when you're swamped with inkies.

The puzzles require you to paint certain objects in specific colors, and the challenge comes from the fact that Blob can only carry one color of paint at a time. You'll also be required to mix colors, so you can mix red and blue when you need to paint something purple. The puzzles are the most fun aspects of the game, and as is the theme throughout, they're easy enough so you won't be left scratching your head for too long. But while the game does so well to keep the puzzles and combat from getting tiresome, a bizarre checkpoint system plays spoilsport. There were times when I ran out of lives towards the end of a level, and had to restart the level from the very beginning and repaint everything.

The game throws in a few side-scrolling segments this time to keep things fresh, but on the whole, you can't help but find the level design a tad repetitive. You'll find yourself bringing

color to identical structures again and again, and the few new gameplay elements that it does introduce are too late in the game and aren't used frequently enough. De Blob 2 also throws in a co-op option, with a second player stepping in to aid the main player. It's not the most challenging way to play, but it's a great way for parents to enjoy the game with kids who are new to gaming.

A few annoyances aside, De Blob 2 offers an immensely enjoyable experience thanks to its feel-good theme, funky soundtrack, and accessible gameplay. Some might dismiss this as a kiddy game, but they'd be missing out on something quite special. 

- sameer.desai@chip.in

RATINGS

PLATFORM

De Blob 2

PRICE	Rs 1,999 (Xbox 360, PS3), Rs 1,799 (Wii)
PUBLISHER	THQ
DEVELOPER	Blue Tongue Entertainment
DISTRIBUTOR	E-Xpress Interactive
PHONE	022 29661017
E-MAIL	info@expressgames.in
PLATFORM	Xbox 360, PS3, Wii

FOR

Charming, colorful presentation. Cute art style. Infectious soundtrack. Fun for all ages.

AGAINST

Terrible checkpoint system. Occasional camera issues.


RATING 3/5
The perfect shooter. On paper. BY MURALI VENUKUMAR

Bulletstorm seemed to have it all when it was announced last year. A perfect marriage between Polish developers People Can Fly (of Painkiller fame) and Epic Games, the promos seemed to suggest a transcendent experience that would push the limits of what we would come to expect from a first-person shooter. Slick hype videos, a playable promo-game that flipped the bird at more serious FPSs, and the audacity to stick up to Killzone 3 with a near identical release date all promised good things.

Sadly, the only revelation that playing Bulletstorm manages to elicit is one of crushing disappointment. You play the alcoholic Grayson Hunt, the former member of an elite hit squad known as Dead Echo. Hunt and his band of knuckleheads went rogue after they discovered (surprise!) that General Serrano had been using them to assassinate dissidents. A decade later, and now leading a band of space pirates, Hunt discovers Serrano's ship and decides to take it on – foolishly risking everyone's lives in the process. Both ships crash-land on the planet of Stygia, which is where most of the story takes place.

The deep-ish backstory of the planet is fleshed out nicely, as are the small cast of characters. Hunt is joined by Ishi, a bionic who's mind is gradually being taken over by a resident AI, and a svelte Dead Echo operative with a past named Trishka. The banter between the characters will have you laughing out loud, and you'll warm to them despite the character design being wholly ordinary and very Gears of War-like.

For a game that revels in using the Unreal Engine, the prologue level is terribly

bland, with simplistic models and designs, all splashed with gunmetal gray. Thing's don't change much once you hit the planet surface, aside from the candy-color scheme and stunning vistas. The game gives you many opportunities to stop and stare at some of the sights, and you really get a sense of being on another world. Sadly, the graphics in your immediate vicinity are ordinary. You'll see your fair share of low-res textures, and the level design always pulls you down corridors and combat rooms, where you're given the same set of enemies to kill.

For a game that talked up how different it was from other shooters, what hurts Bulletstorm most is a lack of variety. There are only a handful of enemy types, and one boss battle (that outstays its welcome). There are a couple of mini-bosses, but you face them so often that they quickly become part of the scenery. Much more damning is the fact that the game falls short on fulfilling its basic premise. The 'kill with skill' catchphrase is shot to bits when you realize that the number of stylistic kills you can perform are limited depending on the level and the number of interactive objects within it.

Adding to the disappointment is the fact that most of these kills are bog-standard for any FPS, except that Bulletstorm doles out points for them. You can't use these points for much, aside from purchasing ammo, and unlocking ho-hum secondary abilities for weapons. The most striking tool in your arsenal is the combat leash. Using it on enemies or objects causes them to be pulled towards you in ultra slo-mo, giving you plenty of time to aim your shots. Sadly, you'll find

that even this doesn't help in alleviating the drudgery that combat becomes.

The levels are bite-sized, so you can run through the campaign reasonably quickly. There are a couple of set-piece levels that hint at what could have been, but the grand scale that was alluded to in marketing blitz is missing. The game also has an arcade mode that lets you time attack single stages, and a cooperative multi-player variation of Gears of War's Horde mode called Anarchy. They're minor distractions and go some way toward beefing out a bare bones package, but there's only so much you can do when the basic gameplay mechanic fails to stick.

Bulletstorm could've been so much more than it is – a competent shooter. Fleshed out levels, more toys to play with and more enemies to gob would be a start. As would reigning in the marketing team. 

– feedback@chip.in

RATINGS

FIRST-PERSON SHOOTER

Bulletstorm

PRICE	Rs 2,499 (Xbox 360, PS3), Rs 999 (PC)
PUBLISHER	EA
DEVELOPER	People Can Fly/Epic Games
DISTRIBUTOR	Milestone Interactive
PHONE	022 42764000
E-MAIL	sales@milestoneinteractive.com
PLATFORM	Xbox 360, PS3, PC

FOR

Chuckle-worthy characters and dialogue, pretty scenery (in the distance).

AGAINST

Skillshots are underwhelming. A general lack of depth.



MORTAL KOMBAT™

On its way back to its savage best.

BY SAMEER DESAI

It's been ages since we've been treated to a half decent Mortal Kombat game. Midway tried many things over the years in an attempt to evolve the series, but failed to realize that what we really wanted was quite simple – the ability to inflict hellish pain, spill copious amounts of blood, and kill opponents in the most gruesome ways imaginable. Instead they added side-stepping, new characters that we no longer remember, and even comic book superheroes. If you're having trouble remembering Mortal Kombat vs DC Universe, the most recent MK game, we don't blame you. Your mind has probably blocked every memory of it to save you from the trauma of an MK game that removed gore and added Wonder Woman.

Then Midway went out of business and sold the rights to Mortal Kombat to Warner Bros. With Midway gone, series creator Ed Boon formed NetherRealm Studios, who, under Warner Bros, will aim to bring the series back from the dead with the latest game, simply titled Mortal Kombat. As the name indicates, the new game aims to take the series back to what made us love it. Gone is the 3D plane and side-stepping, and back come the classic stages and characters as we remember them, along with the signature gruesome presentation. In fact, this MK takes brutality to a level that will make even the biggest fans' jaws drop.

The build that we played recently was

two months old and a little rough around the edges, but it still looked fantastic and at par with the visual quality we've come to expect this generation. While the visuals are sharp and rich, the art style remains true to MK. The characters look just as you'd expect, and classic stages like the Living Forest and The Pit evoke a sense of nostalgia while at the same time adding new touches to them. As a fight progresses, you can now see it take a toll on the characters' appearances. The effects of style attacks remain on them throughout the fight, their bodies get soaked in blood, and even their clothes start to rip as the fight goes on. By the end of it, the floor throughout the stage is covered in blood, and if Cyrax is involved, black oil.

Of course, an MK game is nothing without its fatalities, and this one surely won't disappoint. The fatalities will make you jump out of your seat, not only because they're vicious and brutal, but also because of how stylishly they're presented. The slick camera angles and use of slow motion make them look so good that even being on the receiving end of a fatality feels rewarding. This game introduces X-ray moves, which you can use mid-fight when the on-screen gauge fills up. Performing them results in damaging combos performed in slow motion that give you an X-ray view of your opponent's internal organs being turned to a pulp. Think of them as mid-fight

fatalities; a sign of things to come.

Elsewhere, the gameplay is classic MK. It goes back to the 2D plane and feels just like you're playing MK3 again, only a more beautiful HD version of it. All the signature moves and combos are back and even the controls to perform them are nearly unchanged. There's a tag mode this time, which allows you to tag in a second player or involve them in a powerful double-team combo. Unfortunately, the build we played had only 12 fighters and it didn't have an option for multi-player. Only a small portion of the Ladder mode was playable, which pits you against one random opponent after another. So it looks like we'll have to get our hands on the full game to find out what the Story mode holds in store. The only thing that we found a little off was the difficulty. Even on the highest of the five difficulty settings – very hard, the opponents didn't pose much of a challenge. We fully expect this to be adjusted in time for the game's release later this month.

It took us only a few minutes of gameplay to come to the conclusion that we were hoping for – Mortal Kombat is back! While we're still unsure of what more we can expect from the full game, this appetizer has already shown that the game has rectified all that had gone wrong over the years, so MK fans should have no hesitation in picking this up the moment it hits store shelves. 

- sammer.desai@chip.in

Mortal Kombat is scheduled for release for PS3 and Xbox 360 on April 18, 2011.

Sylvester Stallone isn't the first name to come to mind when you think of great auteurs. Far removed from his muscle-an-inch persona, the man is exceedingly intelligent and genuinely likeable. In fact, Rocky (and his commentary track for the film) are repeat viewing material, not only because it's a great film, but also because Stallone absolutely nails the down-and-out fighter that we can't help but get behind. Andre Bishop from Fight Night Champion's story mode isn't as memorable a cliché as Rocky Balboa was, but he does come incredibly close.

While the career-based Legacy mode is still present and mostly unchanged from Round 4, including the requisite character creator, training sessions, XP accrual, leveling up and a full fight calendar, there's no mistaking that the story is what EA Canada had been working their hardest on. In fact, your first order of business on starting the game is to partake in a bare-knuckle prison fight full of bad blood. This is where both new and returning players will get their first jab at Champion's control scheme.

While Round 4 focused on using varying rotations of the right analog stick to throw punches and only added a face button controls as a last minute downloadable afterthought, Champion satisfies both sides of the camp by offering both right analog stick and face button punching in a single control scheme. While those used to the right analog stick scheme from the previous games may find themselves a bit at sea trying to execute some of their old go-to moves, everyone else should find the new scheme to be a happy medium that lets you throw hooks and jabs with the face buttons and more complex overheads and uppercuts with the right analog stick.

The stick-based moves have also been refined, now letting you throw left or right handed punches in one of six simple directions. The improved block functionality requires that the button only be held down to protect from all incoming blows. You also have a button that lets you target the body and a

power modifier that adds a bit of extra fizz to any punch you throw. Be warned that punches expend stamina, and that a smart fighter always paces himself.

The haymaker punches of old have been excised, making for more tactically varied fights. You're also able to counter-punch, with a particularly well done weave being rewarded with a tiny window of opportunity to give your opponent a taste of his own medicine. Unfortunately, counter-punching also seems to yield more stun states, so you'll find yourself using it as a crutch more often than would be ideal. The ability to vary your stance, clinch, play dirty

Series fans will also be struck by how fluid the action is. EA has sped up animations to the extent that the pugilists don't feel like they've got their feet stuck in a puddle of molasses. The fights feel much more fluid and visceral as a result, helped in no small part by enhanced damage modeling and blood spatter. The bare-knuckle fights in particular show off the damage modeling brilliantly and a few of the impacts between fist and face will make you genuinely wince.

Presentation remains strong irrespective of mode, with 50 real life fighters to choose from and all with

unique moves and expertly modeled right down to flexing biceps and ungodly scars. You also have a large number excellent real life and fantasy rings to fight in. The only hiccup in the presentation is the referee, who can't keep himself from blocking the action, and the missing corner game.

Online and local multiplayer modes round out a solid package that'll keep you busy, especially if you have friends to play local multiplayer with. EA could have rode the easy road and churned out another Fight Night Round X, but Champion feels like so much more, making it worthy of a recommendation. Let's hope EA MMA gets the same treatment, assuming that

it isn't axed after the UFC's buyout of rival Strikeforce. 

- feedback@chip.in



RATING
4.5/5

FIGHT★NIGHT CHAMPION

A knock out! And we didn't see it coming.

BY MURALI VENUKUMAR

and showboat round out what was a much needed improvement to a control scheme that hadn't seen an overhaul since the second title in the series.

With the first prison opponent vanquished, the story then follows likeable Bishop (and an equally likable supporting cast) over a number of years with time spent in prison and moving up a weight class once you've served your time. Champion blends the story into the action by incorporating different conditions to the fights that bookend cutscenes. These conditions include a broken hand that you can't use, and a corrupt referee that you must take out of the equation by knocking your opponent out. All these elements come together beautifully, accompanied by neat little touches such as mode-specific commentary and ESPN news reports.

RATINGS

SPORTS

Fight Night Champion

PRICE	Rs 2,499
PUBLISHER	EA Sports
DEVELOPER	EA Canada
DISTRIBUTOR	Milestone Interactive
PHONE	022 42764000
E-MAIL	sales@milestoneinteractive.com
PLATFORM	Xbox 360, PS3

FOR

Improved controls, Champion mode, Stunning presentation.

AGAINST

Missing corner game.



One of the best PSN games just got better

BY SAMEER DESAI

RATING
4/5

PixelJunk Shooter 2 is a 2D puzzle-heavy shooter that relies on the most basic elements of nature for its unique twist on gameplay. The differences between hot and cold, solid and liquid, and light and dark form the basis for the game world, and you must use the properties of these elements to work your way through the game. Your aircraft is equipped with pellet-like bullets as well as homing missiles that help you shoot through obstacles and kill enemies as you go about trying to rescue miners and scientists. The game looks simple, it controls with minimal fuss, and the gameplay mechanics are basic, but they all come together with incredibly well.

Shooter 2 picks up right where the first one left off, and while you don't need to play the first game to enjoy this, it will determine just how much you enjoy it. Getting to trapped miners is tricky, so you must use the various elements against each other to forge your way towards them. For example, pouring water on magma turns it into stone that you can shoot through, or directing magma towards ice will melt it and open up paths. Many of these elements were also present in the first game, and while they're self-explanatory, the game won't reintroduce you to them, assuming you've played the first game. The controls are just as simple and responsive as ever, allowing you to maneuver around the treacherous levels with ease.

The first game threw in many additional tools in the form of fruits and

sponges that helped you carry water or magma around for use in another parts of the level, and they return here as well. The game-changing suits also return. Different suits perform different functions. While some will replace your missiles with magma or water guns, the new hungry suit will let you eat through rock, while the inverter suit will make you resistant to magma and kill you in water, making you change the way you play. There are more enemy types this time around, and more enemies in number too. That didn't sit too well with us, because even though it's called PixelJunk "Shooter" 2, the series' strength lies very much in its puzzles. Still, thanks to its nimble controls, combat areas never get too frustrating, except for the times when enemies suddenly spawn at exists of a stage, resulting in cheap deaths.

One of the major changes from the first game is the increased difficulty. Levels are much more challenging as the various elements conspire against you, and enemies spawn all around you. As in the first game, the boss fights at the end of each stage amp up the difficulty several notches, and each boss fight presents a new challenge. The game also supports offline co-operatively play, and at times it feels like the difficulty spikes are designed with two players in mind. One annoyance in the first game was how it forced you to collect hidden diamonds and locked subsequent levels until you went back, replayed levels and retrieved the required number of diamonds.

Unfortunately, that feature returns, forcing unnecessarily repetition.

The game also adds a two-player online multi-player mode, which is surprisingly fun. It essentially involves one player trying to rescue miners, while the other attempts to foil the escape. It's addictive and the ability to unlock more gadgets and tools gives it a fair amount of replay value.

PixelJunk Shooter remains one of the best downloadable games on the Playstation Store; one that thoroughly deserved this sequel. Shooter 2 delivers a thoroughly enjoyable experience thanks to some ingenious level design, sharp controls, and a brilliant concept that still feels fresh and holds a few surprises. If you've played the first game, a lot of what it contains won't come as a surprise, but if you're new to the series, prepare for one of the best puzzle shooters around. 

- sammer.desia@chip.in

RATINGS

PUZZLE/SHOOTER

PixelJunk Shooter 2

PRICE	Rs 455
PUBLISHER	Sony
DEVELOPER	Q Games
PLATFORM	PS3 (PSN)

FOR

Brilliant level design, superb controls, new elements work very well, catchy soundtrack.

AGAINST

Difficult spikes, forces you to replay some levels.

HOMEFRONT™

RATING 3/5 A great premise wasted by generic execution. BY AVINASH BALI

War brings out the worst in us all. This valuable morsel of information from one of Homefront's leading characters sets the tone for the latest shooter from developer Kaos Studios (Frontlines: Fuel of War). In the near (fictitious) future, a highly violent and unified Korea has forcefully taken control of an economically broken United States. The invasion has obviously not been a pleasant one and throughout the game, players will be visually assaulted by the atrocities of war. Parents are brutally shot down in front of a weeping child, while hundreds of dead bodies are shoveled into a baseball stadium like cattle. It's a stark reminder that war indeed brings out the worst in us all.

Homefront's plot could have been a memorable one considering its setting, but sadly Kaos never truly capitalizes on the concept. Like I mentioned, you'll witness some truly horrific stuff, but these moments are few and far between. Still, I'd say the game's setting is certainly a welcome change from 'unnamed grunt saves entire country'. While Homefront strives to be different on the plot front, gameplay is nothing but a mish mash of older, successfully shooters like Call of Duty and Half Life 2. This makes the game feel like yet another generic shooter you've probably played a million times before. You move from Point A to B, rescue someone, get ambushed, kill a ton of bad dudes, blow stuff up and then save the day. The Call of Duty series is just as guilty as Homefront when it comes to clichéd gameplay, but they know how to mask their lack of innovation with flair.

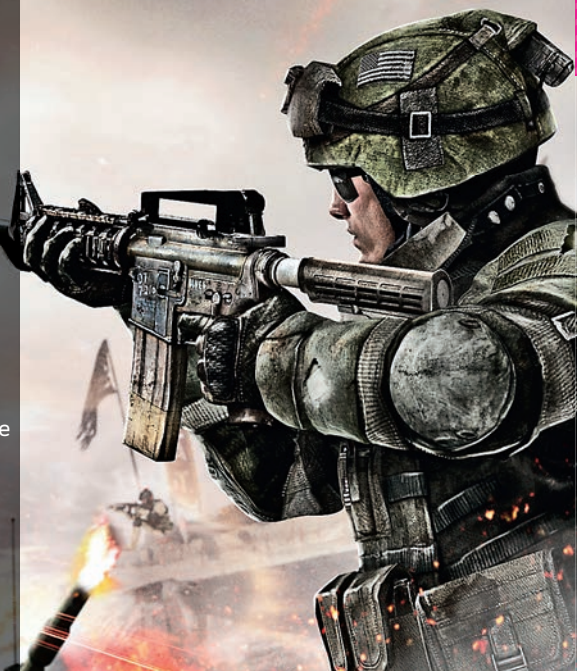
This is something Homefront lacks. For some reason, your character feels like he weighs at least 250 kilos, so controlling him feels like you're controlling a tank. Weapon selection is mediocre and they sound like pea shooters. The level design is also painfully generic. Once again, this feels like wasted potential when you consider the game's setting. Throughout the campaign, you'll also be accompanied

by your squad that is as useless as an umbrella in the Sahara. They will just stand there, take cover, fire at the air, killing some birds in the process, and that's about it. Expecting any sort of valuable back up from them is stupidity on your part. On the normal difficulty, the game isn't tough, so it resorts to continuously throwing ambushes at you in which enemies – I kid you not – just materialize from thin air. So much for immersion.

The game starts off painfully slow, but picks up a bit after the second mission, and just as you're thinking, "Hey, this game isn't too bad", it ends. Just like that. In three and a half hours. Even if Homefront had the best single player campaign on the planet, 3.5 hours is just too short for any game. Once you're done with the campaign, you could however wander into the game's online component, which honestly felt a bit underwhelming. Developer Kaos had been touting this game's MP since a while now, and frankly speaking, there's nothing you haven't seen before. I wasn't able to put too many hours into the multi-player before this review, but what I saw didn't blow my socks off. You have your standard game modes where you kill enemies, and earn points to buy better gear.

While all that is fine and dandy, Homefront's maps have been designed in such a way that they encourage sniping. Nearly every game I played was populated majorly by snipers making life miserable for regular infantry folk. And since maps are huge, life can end for you real fast from any corner of the map. Another sore point for PC gamers will be finding well populated servers. However, these are teething problems faced by even the biggest games, so maybe Homefront will get its act together in the coming months as well.

Unfortunately, there's nothing that can be done about its painfully short and average single player campaign. If Kaos has capitalized on their setting



and backed it up with some truly heart wrenching gameplay, we could have had a game that could very well hold its own against other shooters from this genre. As it stands though, Homefront is nothing but an average shooter that brings nothing new to the table. Consider it only if you're a multiplayer junkie. 

- avinash@tech2.com

RATINGS

FIRST-PERSON SHOOTER

Homefront

PRICE	Rs 699 (PC), Rs 2,499 (Xbox 360, PS3)
PUBLISHER	THQ
DEVELOPER	Kaos Studios
DISTRIBUTOR	E-Xpress Interactive
PHONE	022 29661017
E-MAIL	info@expressgames.in
PLATFORM	Xbox 360, PS3, PC

FOR

Intriguing setting, if tweaked, multiplayer could be awesome, can be entertaining at times.

AGAINST

Painfully short, feels generic, lacks polish.



HERE'S A LOOK AT THE BIGGEST GAME RELEASES FROM APRIL TO JUNE.

SAMEER DESAI

THE GAMES OF Q2

In our January issue, I did a round-up of the games that were heading to stores in the first three months of 2011, and quite a deluge it was. There's been an assault of one AAA game after another, and even with an ever growing backlog of unplayed games, the frequency of high quality new releases shows no signs of slowing down. We now move into the second quarter, and you can expect that backlog to get bigger still.

April starts off with a bang with *Need for Speed: Shift 2 Unleashed* (360, PS3, PC) on the 1st itself. Unlike last year's *Hot Pursuit*, this one falls more on the simulation side of the genre. The 18th will witness the release of Valve's highly anticipated first-person mind-bending puzzle game *Portal 2* (360, PS3, PC). The sequel also adds multi-player and cross-platform play between PC and PS3. The very same day sees the return to form of the long-running *Mortal Kombat* (360, PS3) series, which has more blood, gore and brutality than ever before.

A couple of shooters round out the April releases. First up, there's Sony's *SOCOM 4* (PS3), which is a tactical third-person shooter set for release on the 19th. Developed by Zipper Interactive, this game will also be playable entirely using Playstation Move. The last release of the month is Codies' *Operation Flashpoint: Red River* (360, PS3, PC). The previous game in the series fell well short of *Battlefield* and *CoD* levels, so we'll have to wait and see how this one turns out.

May is when things start to really hot up. After 12 years of waiting, *Duke Nukem* will finally get to kick ass and chew bubblegum in high definition when

Duke Nukem Forever (360, PS3, PC) hit stores on the 6th. The 17th will see the release of the sequel to one of the most popular PC RPGs – *The Witcher*. Developer CD Projekt has developed their own engine for *The Witcher 2* (PC), which will be sold DRM-free via GOG.com.

The biggest release of May is undoubtedly Rockstar and Team Bondi's 1940s murder mystery sandbox title *LA Noire* (360, PS3). Set to release on the 20th, it pushes the boundaries of character modeling and animation and is said to be Rockstar's most serious game yet. May also brings a couple of off-road racing games; first Codemaster's rally title *Dirt 3* (360, PS3, PC) on the 24th, and then THQ's *MX vs ATV Alive* (360, PS3) sometime in mid-May. Other prominent May releases include Sega's arcade tennis title *Virtua Tennis 4* (360, PS3, PC); Bethesda's parkour-inspired FPS *Brink* (360, PS3, PC); Warner's attempt to resurrect the F.E.A.R. franchise with *F.3.A.R* (360, PS3, PC); and Volition's survival-horror twist to the *Red Faction* series with *Red Faction: Armageddon* (360, PS3, PC).

By contrast, June only has one major release as of now – Sony's *Infamous 2* (PS3). The first game was a brilliant open-world superhero/anti-hero action game, and the sequel, with support for user-created missions, is looking rather excellent too. I'm sure there will be more games popping up in June, but even as it stands, Q2 packs quite a punch. 🇮🇳

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**THE BIGGEST
RELEASE OF MAY
IS UNDOUBTEDLY
ROCKSTAR'S LA NOIRE.**



PROCESSORS: Intel



NAME	PRICE (Rs)	CPU SOCKET	NUMBER OF CORES	CLOCK SPEED	MFG PROCESS	TDP
Intel Core 2 Duo E7500	5,725	LGA 775	2	2.93 GHz	45 nm	65 W
Intel Core i3-540	5,885	LGA 1156	2	3.06 GHz	32 nm	73 W
Intel Core i3-550	6,635	LGA 1156	2	3.20 GHz	32 nm	73 W
Intel Core i5-2300 (Sandy Bridge)	9,660	LGA 1155	4	2.8 GHz	32 nm	95 W
Intel Core 2 Duo E8400	9,955	LGA 775	2	3.0 GHz	45 nm	65 W
Intel Core i5-661	10,650	LGA 1156	2	3.33 GHz	32 nm	87 W
Intel Core i5-2400 (Sandy Bridge)	10,705	LGA 1155	4	3.10 GHz	32 nm	95 W
Intel Core i5-2500 (Sandy Bridge)	10,970	LGA 1155	4	3.30 GHz	32 nm	95 W
Intel Core i5-760	11,130	LGA 1156	4	2.80 GHz	45 nm	95 W
Intel Core i7-950	16,375	LGA 1366	4	3.06 GHz	45 nm	130 W
Intel Core i7-2600 (Sandy Bridge)	18,405	LGA 1155	4	3.40 GHz	32 nm	95 W
Intel Core i7-875K	21,510	LGA 1156	4	2.93 GHz	45 nm	95 W
Intel Core i7-960	28,625	LGA 1366	4	3.20 GHz	45 nm	130 W
Intel Core i7-980X Extreme	55,645	LGA 1366	6	3.33 GHz	32 nm	130 W

PROCESSORS: AMD



NAME	PRICE (Rs)	CPU SOCKET	NUMBER OF CORES	CLOCK SPEED	MFG PROCESS	TDP
AMD Sempron 145	2,000	AM3	1	2.80 GHz	45 nm	45 W
AMD Athlon II X2 250	3,055	AM3	2	3.00 GHz	45 nm	65 W
AMD Athlon II X2 245	3,105	AM3	2	2.90 GHz	45 nm	65 W
AMD Athlon II X2 255	3,185	AM3	2	3.10 GHz	45 nm	65 W
AMD Phenom II X2 550 BE	4,445	AM3	2	3.10 GHz	45 nm	80 W
AMD Phenom II X2 555 BE	4,605	AM3	2	3.20 GHz	45 nm	80 W
AMD Athlon II X4 645	5,355	AM3	4	3.10 GHz	45 nm	95 W
AMD Phenom II X4 955 BE	7,295	AM3	4	3.20 GHz	45 nm	125 W
AMD Phenom II X4 970	8,885	AM3	4	3.50 GHz	45 nm	125 W
AMD Phenom II X6 1055T	8,965	AM3	6	2.80 GHz	45 nm	125 W
AMD Phenom II X6 1075T	9,925	AM3	6	3.00 GHz	45 nm	125 W
AMD Phenom II X6 1090T BE	10,435	AM3	6	3.20 GHz	45 nm	125 W

MOTHERBOARDS: AMD - IGP



NAME	PRICE (Rs)	CPU SOCKET	CHIPSET	MEMORY SUPPORT	D-SUB DVI HDMI	PCI X16 PCI SATA USB
ECS A740GM-M	1,955	AM2+	AMD 740G + AMD SB700	DDR2	✓ ✓ ✗	1 2 6 4
Biostar A780L	2,705	AM2+	AMD 760G + AMD SB710	DDR2	✗ ✓ ✗	1 2 6 7
ECS A785GM-M3	3,055	AM2+	AMD 785G + AMD SB710	DDR2	✓ ✓ ✗	1 2 6 4
Biostar TA880GB+	4,285	AM3	AMD 880G + AMD SB710	DDR3	✓ ✓ ✓	1 2 6 7
ECS A885GM-A2	4,295	AM3	AMD 880G + AMD SB850	DDR3	✓ ✓ ✗	2 2 0 6
Gigabyte 880GM-UD2H	4,485	AM3	AMD 880G + AMD SB710	DDR3	✓ ✓ ✓	1 2 6 6
Asus M4A88T-M	5,165	AM3	AMD 880G + AMD SB710	DDR3	✓ ✓ ✓	1 1 6 6
MSI 880GMA-E45	5,675	AM3	AMD 880G + AMD SB850	DDR3	✓ ✓ ✓	1 1 0 4
Gigabyte GA-880GM-USB3	5,675	AM3	AMD 880G + AMD SB710	DDR3	✓ ✓ ✓	1 2 5 12
Biostar TA890GX	6,795	AM3	AMD 890GX + AMD SB850	DDR3	✗ ✓ ✓	1 2 5 6
ECS A890GXM-A	7,645	AM3	AMD 890GX + AMD SB850	DDR3	✓ ✓ ✓	3 1 0 6
Asus M4A89GTD PRO	8,935	AM3	AMD 890GX + AMD SB850	DDR3	✓ ✓ ✓	2 2 0 6

NOTE: Street prices (incl. VAT) as on 10 March 2011.

CHIP brings you a roundup of all the latest and greatest products on the market.

MOTHERBOARDS: AMD - Non-IGP



NAME	PRICE (RS)	CPU SOCKET	CHIPSET	MEMORY SUPPORT	PCIE X16 SLOTS	PCI SATA USB
Asus M4A87TD/USB3	5,915	AM3	AMD 870 + AMD SB850	DDR3	1	0 6 2
Asus M4A87TD EVO	7,090	AM3	AMD 870 + AMD SB850	DDR3	2	0 6 2
MSI 870A FUZION	10,705	AM3	AMD 770 + AMD SB710	DDR3	2	1 6 6
MSI 890FXA-GD70	10,705	AM3	AMD 890FX + AMD SB850	DDR3	5	1 6 6
Gigabyte 890FXA-UD5	12,200	AM3	AMD 890FX + AMD SB850	DDR3	2	1 6 14

MOTHERBOARDS: Intel - IGP



NAME	PRICE (RS)	CPU SOCKET	CHIPSET	MEMORY SUPPORT	D-SUB DVI HDMI	PCIE X16 PCI SATA USB
ECS G41T-M5	2,115	LGA 775	Intel G41 + ICH7	DDR2	✗ ✗ ✗	1 1 2 4
MSI G41M-P33	2,730	LGA 775	Intel G41 + ICH7	DDR3	✓ ✗ ✗	1 2 4 4
Asus P5G41C-M LX	2,945	LGA 775	Intel G41 + ICH7	DDR3	✗ ✗ ✗	1 2 4 8
Intel BOXDG41TX	3,910	LGA 775	Intel G41 + ICH7	DDR3	✓ ✓ ✗	1 2 4 8
Gigabyte H55M-S2V	3,940	LGA 1156	Intel H55	DDR3	✓ ✗ ✓	1 2 6 8
ECS H55H-CM	4,095	LGA 1156	Intel H55	DDR3	✓ ✓ ✓	1 1 6 6
Intel BOXDG43RK	4,655	LGA 775	Intel G43 + ICH10	DDR3	✓ ✗ ✗	1 2 4 12
Intel BLKDH67CL	6,265	LGA 1155	Intel H67	DDR3	✓ ✓ ✓	1 3 3 6
Asus P8H67-M	8,080	LGA 1155	Intel H67	DDR3	✓ ✓ ✗	2 1 4 6
Asus P8H67-M PRO	8,935	LGA 1155	Intel H67	DDR3	✓ ✓ ✓	2 2 4 4
Asus P8H67-M EVO	9,900	LGA 1155	Intel H67	DDR3	✓ ✓ ✓	2 1 4 4

MOTHERBOARDS: Intel - Non-IGP



NAME	PRICE (RS)	CPU SOCKET	CHIPSET	MEMORY SUPPORT	PCIE X16 SLOTS	PCI SATA USB
ECS P55H-A	6,555	LGA 1156	Intel P55	DDR3	2	2 6 8
Intel BLKDP67BA	7,065	LGA 1155	Intel P67	DDR3	1	3 3 6
MSI P55A-G55	7,305	LGA 1156	Intel P55	DDR3	2	3 6 8
Asus P7P55D Pro	9,285	LGA 1156	Intel P55	DDR3	1	2 7 8
MSI P55A-GD65	9,900	LGA 1156	Intel P55	DDR3	2	2 2 5
MSI X58 Pro-E X58 ATX	10,705	LGA 1366	Intel X58 + ICH10R	DDR3	3	2 2 6
Asus P8P67	12,040	LGA 1155	Intel P67	DDR3	2	3 4 6
Gigabyte GA-X58-USB3	12,095	LGA 1366	Intel X58 + ICH10R	DDR3	2	1 6 6
Asus Sabertooth X58	12,225	LGA 1366	Intel X58 + ICH10R	DDR3	3	1 6 6
Intel DX58SO	13,270	LGA 1366	Intel X58 + ICH10R	DDR3	2	1 6 8
Asus P8P67 Pro	13,700	LGA 1155	Intel P67	DDR3	3	2 4 6
Intel BOXDX58SO2	14,905	LGA 1366	Intel X58 + ICH10R	DDR3	2	1 6 6
Asus Rampage III Gene	15,810	LGA 1366	Intel X58 + ICH10R	DDR3	2	1 6 7
MSI Big-Bang X-Power	18,740	LGA 1366	Intel X58 + ICH10R	DDR3	6	6 6 4
Gigabyte GA-X58A-UD7	19,850	LGA 1366	Intel X58 + ICH10R	DDR3	2	1 6 10

NOTE: Street prices (incl. VAT) as on 10 March 2011.



GRAPHICS CARDS: ATI



NAME	PRICE (Rs)	RADEON GPU	DIRECT X	MEMORY TYPE	MEMORY BUS WIDTH		STREAM PROCESSORS	CORE MEMORY SPEED (MHZ)	
Asus EAH5450 SILENT/DI/1GD3	2,945	HD 5450	11.0	DDR3	1 GB	64-bit	80	650 MHz	800 MHz
Sapphire HD 5670	5,565	HD 5670	11.0	GDDR5	512 MB	128-bit	400	775 MHz	1000 MHz
Asus EAH5670/DI/1GD5	5,725	HD 5670	11.0	GDDR5	1 GB	128-bit	400	775 MHz	1000 MHz
Sapphire HD5750 11164-00	6,850	HD 5750	11.0	GDDR5	1 GB	128-bit	720	700 MHz	1150 MHz
XFX HD-577X-ZNFK	8,590	HD 5770	11.0	GDDR5	1 GB	128-bit	800	850 MHz	1200 MHz
MSI R6850-PM2D1GD5	11,825	HD 6850	11.0	GDDR5	1 GB	256-bit	960	775 MHz	1000 MHz
Asus EAH6850 DC/2DIS/1GD5	11,960	HD 6850	11.0	GDDR5	1 GB	256-bit	960	790 MHz	1000 MHz
XFX HD-685X-ZNFC	13,540	HD 6850	11.0	GDDR5	1 GB	256-bit	960	775 MHz	1000 MHz
MSI R6870-2PM2D1GD5	14,445	HD 6870	11.0	GDDR5	1 GB	256-bit	1120	900 MHz	1050 MHz
Asus EAH6870/2DI2S/1GD5	14,580	HD 6870	11.0	GDDR5	1 GB	256-bit	1120	900 MHz	1050 MHz
Sapphire HD 5850	15,985	HD 5850	11.0	GDDR5	1 GB	256-bit	1440	725 MHz	1000 MHz
Sapphire HD 6950	17,525	HD 6950	11.0	GDDR5	2 GB	256-bit	1408	800 MHz	1250 MHz
Asus EAH6950/2DI2S/2GD5	18,220	HD 6950	11.0	GDDR5	2 GB	256-bit	1408	800 MHz	1250 MHz
Powercolor AX6970 2GBD5-M2DH	21,460	HD 6970	11.0	GDDR5	2 GB	256-bit	1536	880 MHz	1375 MHz
Sapphire HD 6970	22,685	HD 6970	11.0	GDDR5	2 GB	256-bit	1536	880 MHz	1375 MHz
Asus EAH6970/2DI2S/2GD5	23,440	HD 6970	11.0	GDDR5	2 GB	256-bit	1536	880 MHz	1375 MHz

GRAPHICS CARDS: Nvidia



NAME	PRICE (Rs)	GEFORCE GPU	DIRECT X	MEMORY TYPE	MEMORY BUS WIDTH		STREAM PROCESSORS	CORE MEMORY SPEED (MHZ)	
Palit NE221000FHD56	2,545	210	10.1	DDR2	512 MB	64-bit	16	589 MHz	800 MHz
Asus Nvidia ENGT220/DI/1GD2	3,665	GT 220	10.1	DDR2	1 GB	128-bit	48	625 MHz	800 MHz
Sparkle GeForce GT220	4,285	GT 220	10.1	DDR3	1 GB	128-bit	48	625 MHz	1400 MHz
Palit NEAT2400FHD01	4,285	GT 240	10.1	DDR3	1 GB	128-bit	96	575 MHz	800 MHz
Zotac GeForce GT240	4,410	GT 240	10.1	DDR3	1 GB	128-bit	96	550 MHz	900 MHz
MSI N430GT-MD1GD3/LP	4,735	GT 430	11	DDR3	1 GB	128-bit	96	700 MHz	900 MHz
Asus ENGT240/DI/1GD3/A	5,220	GT 240	10.1	DDR3	1 GB	128-bit	96	550 MHz	850 MHz
Sparkle GeForce GT240	5,355	GT 240	10.1	DDR2	1 GB	128-bit	96	550 MHz	850 MHz
Zotca GeForce GT430	5,360	GT 430	11	DDR3	1 GB	128-bit	96	700 MHz	900 MHz
XFX GT 240 GT-240X-ZHFC	5,725	GT 240	10.1	GDDR5	1 GB	128-bit	96	550 MHz	900 MHz
eVGA GeForce 9800GT	6,690	9800GT	10	DDR3	1 GB	256-bit	112	550 MHz	900 MHz
Asus ENGTS450 DIRECTCU/DI/1GD5	7,415	GTS 450	11	GDDR5	1024 MB	128-bit	192	850 MHz	900 MHz
MSI N450GTS Cyclone 1GD5/OC	7,705	GTS 450	11	GDDR5	1 GB	128-bit	192	850 MHz	1000 MHz
Palit GeForce GTS450 SONIC	8,105	GTS 450	11	GDDR5	1 GB	128-bit	192	930 MHz	1000 MHz
Zotac GeForce GTX 460 AMP	12,495	GTX 460	11	GDDR5	1 GB	256-bit	336	810 MHz	1000 MHz
Sparkle GeForce GTX470	19,905	GTX 470	11	GDDR5	1280 MB	320-bit	448	607 MHz	837 MHz
MSI N570GTX M2D12D5	20,335	GTX 570	11	GDDR5	1280 MB	320-bit	512	732 MHz	950 MHz
Zotac GeForce GTX 570	22,875	GTX 570	11	GDDR5	1280 MB	320-bit	480	732 MHz	950 MHz
Palit GeForce GTX580	29,885	GTX 580	11	GDDR5	1536 MB	384-bit	512	772 MHz	1002 MHz
Asus Nvidia GTX 580	30,790	GTX 580	11	GDDR5	1.5 GB	384-bit	512	782 MHz	1002 MHz
Sparkle GeForce GTX 580	33,290	GTX 580	11	GDDR5	1.5 GB	384-bit	512	772 MHz	1002 MHz

NOTE: Street prices (incl. VAT) as on 10 March 2011.

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EXTERNAL DRIVE



NAME	PRICE(Rs)	CAPACITY	INTERFACE	FORM FACTOR
Transcend StoreJet 25D2	2,660	250 GB	USB 2.0	2.5-inch
Buffalo MiniStation Lite	2,675	320 GB	USB 2.0	2.5-inch
Transcend StoreJet 25D2	2,730	320 GB	USB 2.0	2.5-inch
Toshiba Canvio	2,840	320 GB	USB 2.0	2.5-inch
Iomega EGO Portable	2,945	320 GB	USB 2.0	2.5-inch
Seagate Free Agent GoFlex	2,970	320 GB	USB 2.0	3.5-inch
Buffalo MiniStation	3,160	320 GB	USB 2.0	2.5-inch
Toshiba Canvio	3,295	500 GB	USB 2.0	2.5-inch
Transcend StoreJet 25D2	3,340	500 GB	USB 2.0	2.5-inch
Western Digital My Book Essential	4,040	1 TB	USB 2.0	2.5-inch
Toshiba Canvio	6,090	1 TB	USB 3.0	2.5-inch
Western Digital My Book Essential	6,100	1.5 TB	USB 2.0	3.5-inch
Western Digital My Book Studio Edition II	11,025	2 TB	USB 2.0	3.5-inch
LaCie Sleek	14,180	2 TB	USB 2.0	3.5-inch

USB FLASH DRIVE



NAME	CAPACITY	PRICE (Rs)
iBall Ultra Strong	4 GB	405
Kingston V90V	4 GB	430
Corsair CMF Mini	4 GB	670
Sandisk Cruzer Blade	8 GB	675
Kingston V90V	8 GB	700
Transcend JetFlash V70	8 GB	750
Sandisk Cruzer Blade	16 GB	1,105
Transcend JetFlash 500	16 GB	1,130
Kingston V90V	16 GB	1,260
Corsair CMF Mini	16 GB	1,475
Kingston V90V	32 GB	2,650
ADATA C906	32 GB	3,525

CAMCORDERS



NAME	PRICE (Rs)	RESOLUTION	OPTICAL ZOOM
Canon Legria FS 305	14,235	1024 x 768	37x
Sony Handycam DCR-SX44E	14,930	720 x 480	60x
Samsung K44	15,765	720 x 480	52x
Sony Handycam DCR-SX63E	16,935	720 x 480	60x
Sony Handycam DCR-SR88E	23,890	720 x 480	60x
Canon Legria HF R17	31,300	1920 x 1080	20x
Canon Legria HF R18	40,875	1920 x 1080	20x
Canon Legria HF M300	42,910	1920 x 1080	15x
Canon Legria HF M31	52,435	1920 x 1080	15x
Canon Legria HF S200	59,815	1920 x 1080	10x

PROJECTORS



NAME	PRICE (Rs)	TYPE	BRIGHTNESS	NATIVE RESOLUTION	CONTRAST RATIO
BENQ MP515	26,860	DLP	2500 Lumens	800 x 600	2600:1
LG BS275	32,105	DLP	2700 Lumens	800 x 600	2200:1
Mitsubishi EX200U	37,935	DLP	2300 Lumens	1024 x 768	1250 : 1
Sony VPL-EX100 Projector	38,525	LCD	2300 Lumens	1024 x 768	2200:1
LG HS201 G	41,735	DLP	2000 Lumens	800 x 600	2000:1
LG DX630	42,910	DLP	3000 Lumens	1024 x 768	2300:1
Sharp PGF312X	50,560	DLP	3000 Lumens	1024 x 768	2200:1
Sony VPL-EX120 Projector	51,365	LCD	2600 Lumens	1024 x 768	2500:1
Sharp XGC435X	72,225	LCD	4000 Lumens	1024 x 768	550:1
Mitsubishi XD600U	81,855	DLP	4500 Lumens	1024 x 768	2000 : 1
Mitsubishi HC6800	139,635	DLP	1500 Lumens	1920 x 1080	30000:1

NOTE: Street prices (incl. VAT) as on 10 March 2011.



LAPTOPS



NAME	PRICE (Rs)	WEIGHT	PROCESSOR	MEMORY	CHIPSET	DISPLAY	HDD	OPTICAL DRIVE	OS
iBall Lilbook-1044	17,655	1.22 Kg	Intel Atom	1.60 GHz	2 GB	10.1-inch	500 GB	None	Linux
Lenovo Ideapad S10	17,745	1.50 Kg	Intel Atom	1.66 GHz	1 GB	10.1-inch	250 GB	None	Win 7 Starter
Lenovo IdeaPad S10-3C	17,870	1.50 Kg	Intel Atom	1.66 GHz	1 GB	10.1-inch	250 GB	None	Win 7 Starter
Dell Inspiron Mini 10	18,675	1.37 Kg	Intel Atom	1.66 GHz	1 GB	10-inch	250 GB	None	Win 7 Starter
Dell Inspiron Mini 10	20,335	1.37 Kg	Intel Atom	1.66 GHz	2 GB	10-inch	250 GB	None	Win 7 Starter
Toshiba NB250-A1110	21,210	1.18 Kg	Intel Atom	1.66 GHz	1 GB	10.1-inch	250 GB	None	Win 7 Starter
Lenovo Ideapad S10-3s Wind	22,045	1.50 Kg	Intel Atom	1.83 GHz	2 GB	10.1-inch	250 GB	None	Win 7 Starter
Asus EeePC 1008P	22,795	1.14 Kg	Intel Atom	1.66 GHz	2 GB	10.1-inch	320 GB	None	Win 7 HP
HP Mini 210-1095TU	22,795	1.22 Kg	Intel Atom	1.66 GHz	2 GB	10.1-inch	320 GB	None	Win 7 starter
Asus EeePC 1215P-BLK019S	25,110	2.70 Kg	Intel Atom N550	1.50 GHz	2 GB	12.0-inch	320 GB	None	Win7 Starter
Samsung NP-R430-JA06	26,055	2.26 Kg	Intel Pentium Dual-Core	2.30 GHz	2 GB	14-inch	320 GB	None	Win 7 HB
Lenovo IdeaPad G460	26,245	2.20 Kg	Intel Pentium Dual-Core	2.10 GHz	2 GB	14-inch	500 GB	DVD+RW	DOS
Asus EeePC 1018P-BLK134S	27,170	2.70 Kg	Intel Atom N550	1.50 GHz	2 GB	10.0-inch	320 GB	None	Win7 Starter
HP Mini 210-1042VU	27,715	1.22 Kg	Intel Atom	1.66 GHz	1 GB	10.1-inch	160 GB	None	Win 7 HB
Acer Aspire 4736Z	27,825	2.45 Kg	Intel Pentium Dual-Core	2.30 GHz	3 GB	14-inch	320 GB	DVD+RW	Linux
Acer Aspire 5742	28,090	2.6 Kg	Intel Core i3	2.26 GHz	2 GB	15.6-inch	500 GB	DVD+RW	Linux
Acer Aspire 5742z	28,355	2.6 Kg	Intel Pentium Dual-Core	2.00 GHz	2 GB	15.6-inch	500 GB	DVD+RW	Win 7 HB
Toshiba Satellite C650-P5210	29,215	2.68 Kg	Intel Pentium Dual-Core	2.26 GHz	3 GB	15.6-inch	320 GB	DVD+RW	Win 7 HB
Dell Vostro 1014	29,425	2.2 Kg	Intel Core 2 Duo	2.1 GHz	4 GB	14.1-inch	320 GB	DVD+RW	Linux
MSI CR420	29,670	2 Kg	Intel Core i3	2.13 GHz	2 GB	14-inch	250 GB	DVD+RW	DOS
HP Compaq Presario 620	31,355	2.50 Kg	Intel Core 2 Duo	2.10 GHz	3 GB	15.6-inch	320 GB	DVD+RW	Win 7 HB
Samsung NP-R439-DA02IN	31,945	2.26 Kg	Intel Core i3	2.26 GHz	4 GB	14-inch	320 GB	DVD+RW	DOS
Samsung NP-R439-DT02IN	32,210	2.26 Kg	Intel Core i3	2.26 GHz	2 GB	14-inch	250 GB	DVD+RW	DOS
MSI CR620	32,585	2.48 Kg	Intel Core i3	2.40 GHz	2 GB	15.6-inch	320 GB	DVD+RW	Win 7 HB
Lenovo IdeaPad G560	33,075	2.60 Kg	Intel Core i3	2.10 GHz	3 GB	15.6-inch	320 GB	DVD+RW	DOS
Acer Aspire 5745	33,440	2.6 Kg	Intel Core i5	2.26 GHz	4 GB	15.6-inch	320 GB	DVD+RW	Linux
Fujitsu Lifebook AH530	33,920	2.6 Kg	Intel Core i3	2.26 GHz	2 GB	15.6-inch	320 GB	DVD+RW	Win 7 HP
Asus A52JT-SX374D	35,200	2.62 Kg	Intel Core i3-350M	2.26 GHz	2 GB	15.6-inch	500 GB	DVD+RW	DOS
Lenovo IdeaPad Z460 59-045596	35,420	2.2 Kg	Intel Core i3	2.40 GHz	3 GB	14-inch	500 GB	DVD+RW	DOS
Toshiba Satellite C650-I5011	35,475	2.6 Kg	Intel Core i3	2.26 GHz	3 GB	15.6-inch	320 GB	DVD+RW	DOS
HP Compaq Presario CQ42-273TU	35,525	2.2 Kg	Intel Core i3	2.26 GHz	3 GB	14-inch	320 GB	DVD+RW	DOS
Dell Inspiron 15R	35,860	2.50 Kg	Intel Core i3	2.40 GHz	3 GB	15.6-inch	320 GB	DVD+RW	DOS
HP Pavilion dv6-3004TU	36,060	3.00 Kg	Intel Core i3	2.26 GHz	2 GB	15.6-inch	320 GB	DVD+RW	DOS
Lenovo IdeaPad Z560 59-045432	36,385	2.9 Kg	Intel Core i3	2.40 GHz	2 GB	15.6-inch	500 GB	DVD+RW	Win 7 HB

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LAPTOPS



NAME	PRICE (Rs)	WEIGHT	PROCESSOR	MEMORY	CHIPSET	DISPLAY	HDD	OPTICAL DRIVE	OS
Asus A42F-VX408R	36,410	2.62 Kg	Intel Core i3-350M	2.26 GHz	3 GB	14-inch	500 GB	DVD+RW	Win 7 HB
Toshiba Satellite L650-I5310	36,830	2.68 Kg	Intel Core i3	2.26 GHz	4 GB	15.6-inch	320 GB	DVD+RW	Win 7 HP
Lenovo IdeaPad Z560 59-045426	37,275	2.9 Kg	Intel Core i3	2.40 GHz	2 GB	15.6-inch	500 GB	DVD+RW	DOS
Sony Vaio VPCEB42EG	37,620	2.70 Kg	Intel Core i3-380M	2.53 GHz	2 GB	15.5-inch	320 GB	None	Win 7 HB
Sony Vaio VPCEA42EG	38,670	2.35 Kg	Intel Core i3-380M	2.53 GHz	4 GB	14-inch	320 GB	DVD+RW	Win 7 HB
HP Pavilion dv6-3109TU	38,735	2.49 Kg	Intel Core i3	2.40 GHz	3 GB	15.6-inch	320 GB	DVD+RW	Win 7 HB
Asus X42JE-VX132D	39,110	2.30 Kg	Intel Core i3	2.40 GHz	2 GB	14-inch	500 GB	DVD+RW	DOS
Asus K52JR-SX196D	40,450	2.62 Kg	Intel Core i3	2.40 GHz	8 GB	15.6-inch	500 GB	DVD+RW	DOS
HP Pavilion dv6-3085TX	41,625	2.45 Kg	Intel Core i3	2.40 GHz	3 GB	15.6-inch	320 GB	DVD+RW	Win 7 HB
Fujitsu Lifebook AH530	41,735	2.5 Kg	Intel Core i5	2.40 GHz	2 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
Samsung R580-JT01-IN	41,735	2.6 Kg	Intel Core i3	2.40 GHz	4 GB	14-inch	500 GB	DVD+RW	Win 7 HP
Toshiba Satellite L640-X4310	43,015	2.26 Kg	Intel Core i5	2.66 GHz	3 GB	14-inch	320 GB	DVD+RW	Win 7 HP
Sony Vaio VPCEA3BGN	45,745	2.35 Kg	Intel Core i3	2.40 GHz	2 GB	14-inch	320 GB	DVD+RW	Win 7 Pro
Dell Inspiron 15R	48,580	2.6 Kg	Intel Core i5	1.60 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HB
MSI FX400	48,980	2.2 Kg	Intel Core i5	2.60 GHz	4 GB	14-inch	500 GB	DVD+RW	Win 7 HP
Lenovo IdeaPad Y560 59-044203	49,865	2.9 Kg	Intel Core i3	2.26 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
Sony Vaio VPCEB46FG	50,160	2.70 Kg	Intel Core i5-480M	2.66 GHz	4 GB	15.5-inch	500 GB	None	Win 7 HP
Dell XPS 15	51,790	2.96 Kg	Intel Core i3	2.66 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
MSI FX600	51,790	2.4 Kg	Intel Core i5	2.0 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
Asus B43F-V0023V	52,780	2.48 Kg	Intel Core i5	2.53 GHz	4 GB	14-inch	500 GB	DVD+RW	Win 7 HP
Sony Vaio VPCEB3AGG	53,875	2.70 Kg	Intel Core i5	2.66 GHz	4 GB	15.5-inch	320 GB	DVD+RW	Win 7 Pro
Lenovo IdeaPad Y560 59-040352	53,930	2.9 Kg	Intel Core i5	2.40 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
Toshiba Satellite L650-X5310	54,360	2.68 Kg	Intel Core i5	2.90 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
Asus U45JC-WX016X	57,115	2.14 Kg	Intel Core i3	2.40 GHz	4 GB	14-inch	320 GB	DVD+RW	Win 7 Pro
Lenovo IdeaPad Y560 59-055616	60,995	2 Kg	Intel Core i7	1.73 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
HP Pavilion dv6-3052TX	61,205	3.00 Kg	Intel Core i7	1.60 GHz	4 GB	15.6-inch	640 GB	DVD+RW	Win 7 HP
Sony Vaio VPCS137GG	66,075	2.00 Kg	Intel Core i5	2.66 GHz	4 GB	13.3-inch	500 GB	DVD+RW	Win 7 Pro
Asus N53JQ-SZ103V	67,645	2.90 Kg	Intel Core i7	1.73 GHz	4 GB	15.6-inch	640 GB	DVD+RW	Win 7 HP
Dell Alienware M11x	71,365	2.0 Kg	Intel Core 2 Duo	1.30 GHz	4 GB	11.6-inch	500 GB	None	Win 7 HP
Toshiba Satellite A660-X5310	82,395	2.62 Kg	Intel Core i5	2.66 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
Fujitsu Lifebook S710	84,960	2.15 Kg	Intel Core i5	2.53 GHz	4 GB	14-inch	320 GB	DVD+RW	Win 7 Pro
Dell Alienware M15X	100,590	4.08 Kg	Intel Core i7	1.60 GHz	4 GB	15.6-inch	500 GB	DVD+RW	Win 7 HP
Asus G53JW-IX157V	107,590	3.6 Kg	Intel Core i7	1.73 GHz	6 GB	15.6-inch	500 GB	BD-ROM	Win 7 HP
Sony Vaio VPCZ136GG	111,735	1.41 Kg	Intel Core i5	2.66 GHz	6 GB	13.1-inch	128 GB (SSD)	DVD+RW	Win 7 Pro

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DIGITAL CAMERAS

NAME	PRICE (Rs)	RESOLUTION	OPTICAL ZOOM	WIDE ANGLE	APERTURE	LCD SIZE	SHUTTER SPEED
Nikon Coolpix L21	4,655	4000 x 3000	3.6x	35 mm	F3.1 - F6.7	2.5-inch	2 - 1 4000 sec
Olympus FE-4020	6,850	4288 x 3216	4x	26 mm	F2.6 - F5.9	2.7-inch	1 2-1 2000 sec
Panasonic Lumix DMC FS42	6,955	3648 x 2736	4x	22 mm	F2.8 - F5.9	2.5-inch	8 - 1 2000 sec
Sony Cybershot DSC-S2100	6,985	4000 x 3000	3x	26 mm	F3.1 - F5.6	3.0-inch	1 4 - 1 2000 sec
Canon Powershot A3100 IS	7,000	4000 x 3000	4x	35 mm	F2.7 - F5.6	2.7-inch	1 - 1 1600 sec
Nikon Coolpix S3000	7,250	4000 x 3000	4x	27 mm	F3.2 - F5.9	2.7-inch	4 - 1 1000 sec
Sony Cybershot DSC-W310	7,975	4000 x 3000	4x	28 mm	F3.0 - F4.3	2.7-inch	1 4 - 1 2000 sec
Casio Exilim EX-Z90	8,775	4000 x 3000	3x	35 mm	F3.1 - F5.9	2.7-inch	1 4 - 1 2000 sec
Sony Cybershot DSC-W320	8,965	4320 x 3240	4x	26 mm	F2.7 - F5.7	2.7-inch	1 8 - 1 1600 sec
Canon Digital IXUS 105 IS	8,990	4000 x 3000	4x	28 mm	F2.8 - F5.9	2.7-inch	1 - 1 1500 sec
Fujifilm FinePix JZ300	9,420	4000 x 3000	10x	28 mm	F3.3 - F5.6	2.7-inch	8 - 1 2000 sec
Casio Exilim EX-Z280	9,740	4000 x 3000	4x	26 mm	F2.6 - F5.9	2.7-inch	4 - 1 2000 sec
Casio Exilim EX-Z550	10,650	4320 x 3240	4x	26 mm	F2.6 - F5.9	2.7-inch	4 - 1 2000 sec
Sony Cybershot DSC-W360	10,890	4320 x 3240	4x	26 mm	F2.7 - F8.0	3.0-inch	2 - 1 1600 sec
Canon Digital IXUS 130 IS	11,400	4320 x 3240	4x	24 mm	F2.8 - F8	2.7-inch	1 - 1 1500 sec
Fujifilm FinePix Z700 EXR	12,255	4000 x 3000	5x	35 mm	F3.9 - F4.7	3.5-inch	4 - 1 1000 sec
Olympus SP-600 UZ	12,630	3968 x 2976	15x	28 mm	F3.5 - F5.4	2.7-inch	1 2 - 1 2000 sec
Nikon Coolpix L110	13,620	4000 x 3000	15x	28 mm	F3.5 - F5.4	3.0-inch	15 - 1 1500 sec
Nikon Coolpix S8000	14,525	4320 x 3240	10x	35 mm	F3.5 - F7	3.0-inch	4 - 1 1000 sec
Sony Cybershot DSC-H55	14,930	4320 x 3240	10x	25 mm	F3.5 - F5.5	3.0-inch	2 - 1 1600 sec
Sony Cybershot DSC-WX1	14,930	3648 x 2736	5x	24 mm	F2.4 - F5.9	2.7-inch	2 - 1 6000 sec
Panasonic Digital Camera Lumix ZR1	16,265	4000 x 3000	8x	25 mm	F3.3 - F5.9	2.7-inch	8 - 1 2000 sec
Nikon Coolpix S1100pj	16,345	4320 x 3240	5x	28 mm	F3.9 - F5.8	3.0-inch	NA
Samsung EC-ST5500	16,750	4320 x 3240	7x	31 mm	F3.3 - F5.5	3.7-inch	1 8-1 2000 sec
Samsung EC-WB650	16,750	4000 x 3000	15x	24 mm	F3.2 - F5.8	3.0-inch	1-1 2000 sec
Casio Exilim EX-H10	17,445	4000 x 3000	10x	24 mm	F3.2 - F5.7	3.0-inch	4 - 1 2000 sec
Canon Powershot SX210 IS	18,140	4320 x 3240	14x	28 mm	F3.1 - F5.9	3.0-inch	1 - 1 3200 sec
Olympus MJU-Tough 8010	18,405	4288 x 3216	5x	28 mm	F3.9 - F5.9	2.7-inch	1 4 - 1 2000 sec
Canon Digital IXUS 210 IS	21,080	4320 x 3240	5x	24 mm	F2.8 - F5.9	3.5-inch	1 - 1 3000 sec
Canon Powershot D10 IS	23,865	4000 x 3000	3x	35 mm	F2.8 - F4.9	2.5-inch	1 - 1 1500 sec
Canon Digital IXUS 1000 HS	24,800	3648 x 2736	10x	36 mm	F2.8 - F5.6	3.0-inch	1 - 1 2000 sec
Canon Powershot SX30 IS	27,610	3744 x 2104	35x	24 mm	F2.7 - F5.8	2.7-inch	15 - 1 3200 sec
Canon Powershot G12	30,495	3648 x 2736	5x	28 mm	F2.8 - F4.5	2.8-inch	15 - 1 4000 sec

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MONITORS



NAME	PRICE (Rs)	SCREEN SIZE	WIDESCREEN	NATIVE RESOLUTION	RESPONSE TIME	D-SUB	DVI	HDMI
Acer T231H	17,655	23-inch	✓	1920 x 1080	2 ms	✗	✓	✓
Acer W V203H	6,265	20-inch	✓	1600 x 900	5 ms	✓	✗	✗
AOC e2043Fs LED	6,955	20-inch	✓	1366 x 768	5 ms	✓	✗	✗
AOC F19	5,675	18.5-inch	✓	1366 x 768	5 ms	✓	✓	✓
Asus MS202N	9,070	20-inch	✓	1600 x 900	5 ms	✓	✓	✗
Asus VH162DE	4,550	15.6-inch	✓	1360 x 768	8 ms	✓	✗	✗
Asus VK266H-BK	26,190	25.5-inch	✓	1920 x 1200	2 ms	✓	✓	✓
BenQ G2420HD	12,415	24-inch	✓	1920 x 1080	5 ms	✓	✓	✓
BenQ G610HDA	4,605	15.6-inch	✓	1366 x 768	8 ms	✓	✗	✗
LG W2243	8,565	21.5-inch	✓	1920 x 1080	5 ms	✓	✓	✗
BenQ G925HDA	5,780	18.5-inch	✗	1366 x 768	5 ms	✓	✗	✗
BenQ LED V2200 Eco	13,335	21.5-inch	✓	1920 x 1080	5 ms	✓	✓	✓
BenQ M2700	24,720	27-inch	✓	1920 x 1080	2 ms	✓	✓	✓
BenQ XL2410T LED	29,535	23.6-inch	✓	1920 x 1080	2 ms	✓	✓	✓
Dell U2311H	17,655	23-inch	✓	1920 x 1080	8 ms	✗	✓	✗
Dell U2711	45,475	27-inch	✓	2560 x 1440	6 ms	✗	✓	✓
LG W1643C	4,790	15-inch	✓	1360 x 768	8 ms	✓	✗	✗
Philips 191EL1SB	5,915	19-inch	✓	1366 x 768	5 ms	✗	✓	✗
Philips 241E1SB	11,235	24-inch	✓	1920 x 1080	5 ms	✗	✓	✗
Samsung SyncMaster 2030N	6,795	20-inch	✓	1600 x 900	5 ms	✓	✓	✗
Samsung SyncMaster B1930N	6,345	18.5-inch	✓	1366 x 768	5 ms	✓	✗	✗
Samsung SyncMaster B2230N	9,205	21.5-inch	✓	1920 x 1080	5 ms	✓	✓	✓
ViewSonic VX2250wm	9,310	22-inch	✓	1920 x 1080	5 ms	✓	✓	✗
ViewSonic VX2439wm	13,805	24-inch	✓	1920 x 1080	2 ms	✓	✓	✓
ViewSonic VX2739wm	25,040	27-inch	✓	1920 x 1080	1 ms	✓	✓	✓

CABINETS



NAME	PRICE (Rs)	TYPE	POWER SUPPLY	5.25-INCH BAYS	3.5-INCH BAYS	NUMBER OF FANS
iBall NetTop 009	1,435	ATX	✓	1	4	1
iBall Cabinet 6363	1,445	ATX	✓	3	6	1
Circle Cosmo	1,770	ATX	✓	3	6	1
Circle Royal	2,195	ATX	✓	1	5	1
Cooler Master Elite 335	2,485	ATX	✗	4	1	2
Gigabyte Setto 1000	2,515	ATX	✗	4	6	2
Thermaltake Matrix VD2000BNS	2,890	ATX	✗	4	4	1
Cooler Master Gladiator 600	3,835	ATX	✗	5	5	2
Cooler Master RC690	5,085	ATX	✗	5	5	2
Antec Six Hundred	5,885	ATX	✗	3	6	2
Thermaltake M9D	6,210	ATX	✗	6	3	2
LanCool PC-K62	6,585	ATX	✗	5	4	2
Gigabyte Poseidon 310	6,635	ATX	✗	5	3	2
Cooler Master HAF 922	7,120	ATX	✗	5	1	2
Cooler Master Cosmos S	16,205	ATX	✗	7	4	5

NOTE: Street prices (incl. VAT) as on 10 March 2011.

THERE HASN'T BEEN MUSIC THIS BAD SINCE THE BAHAMEN'S MIND-NUMBING SINGLE 'WHO LET THE DOGS OUT', BUT I DON'T REMEMBER ANYONE LEAVING THEM DEATH THREATS AND FEELING CLEVER FOR DOING SO.

JAMSHED AVARI, DEPUTY EDITOR

INSTANT INFAMY

As I'm sitting here to type this, a music video on YouTube called 'Friday' is steadily climbing past 27 million views, just over a week after it was first posted. You've most probably seen it already—if not, count yourself lucky. The song, at best, is infantile. The existential travails of the seemingly affluent and happy Rebecca Black, a thirteen-year-old American girl, are hardly what anyone would consider worthy of being immortalized in song. Which seat should she choose in the car? Which side is her friend sitting on?! The singing itself is nasal and grating, the lyrics are pure drivel, and the production value is almost completely nil. Worst of all, the video itself is a travesty of what is supposedly an ordinary Friday, with scenes of happy tweens with braces bopping along interspersed with a totally incoherent rapper who looks like a creepy old stalker.

It isn't difficult to see how or why this video went viral. It's so genuinely bad that I can't decide whether to stab my eyes out or trick everyone around me into watching it just so I can point and laugh. It's being hailed as the worst song ever—and that's coming from a generation that thinks Justin Bieber is God. It's been trending on Twitter for over a week, hundreds of parody videos and rants have popped up, major news outlets are carrying the story, and all around the world, people are shuddering at the mere mention of it.

The thing is, it's so easy to bash this video that for a long while, no one believed it was really a commercial song. Many thought it was deliberate; a sort of snarky parody of current pop music. And others have taken it so far that they've posted death threats and seriously nasty personal attacks in the video's comments feed. Some of them read "See this is why her parents should have gone with an abortion",

"we all know Friday comes after Thursday you dumb b****", and "that car crashing and everyone in it dying would be the best end to this garbage song"—these are actually some of the least vicious comments out there, and haven't been flagged for abuse. Others gleefully wish graphic violence, disease and eating disorders on her.

In her first interview after the video went viral, she readily admits to crying when she first saw all the hate, but adds that she has since learnt not to let them get to her. Though she winces when some of the comments are read out, she comes across as calm and self-aware. She even sings a few lines on camera, demonstrating a modicum of actual talent. Her mother is more emotional; angry about the kind of bullying and intimidation that's been raging online. Subsequent interviews have revealed that she has no pretensions about being a great singer, had no say in the writing of the song, and recorded it mainly for her own amusement—an apparently regular practice that small-time studios such as the one she used charge \$2,000 for. Piecing the rest of the facts together, a picture emerges of an ambitious teenager who just wanted to have some fun, and frankly, had no idea what could really happen on the Internet. The whole story should serve as a warning—anything you put up online has a chance of being seen and discussed by the entire world, without context and in an unmoderated environment.

No matter how bad the song or singer is, almost no one has shown any kind of consideration for that fact that she's still a thirteen year old girl. Sure, the song might deserve its share of derision, but when did this kind of cyberbullying become OK? 

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